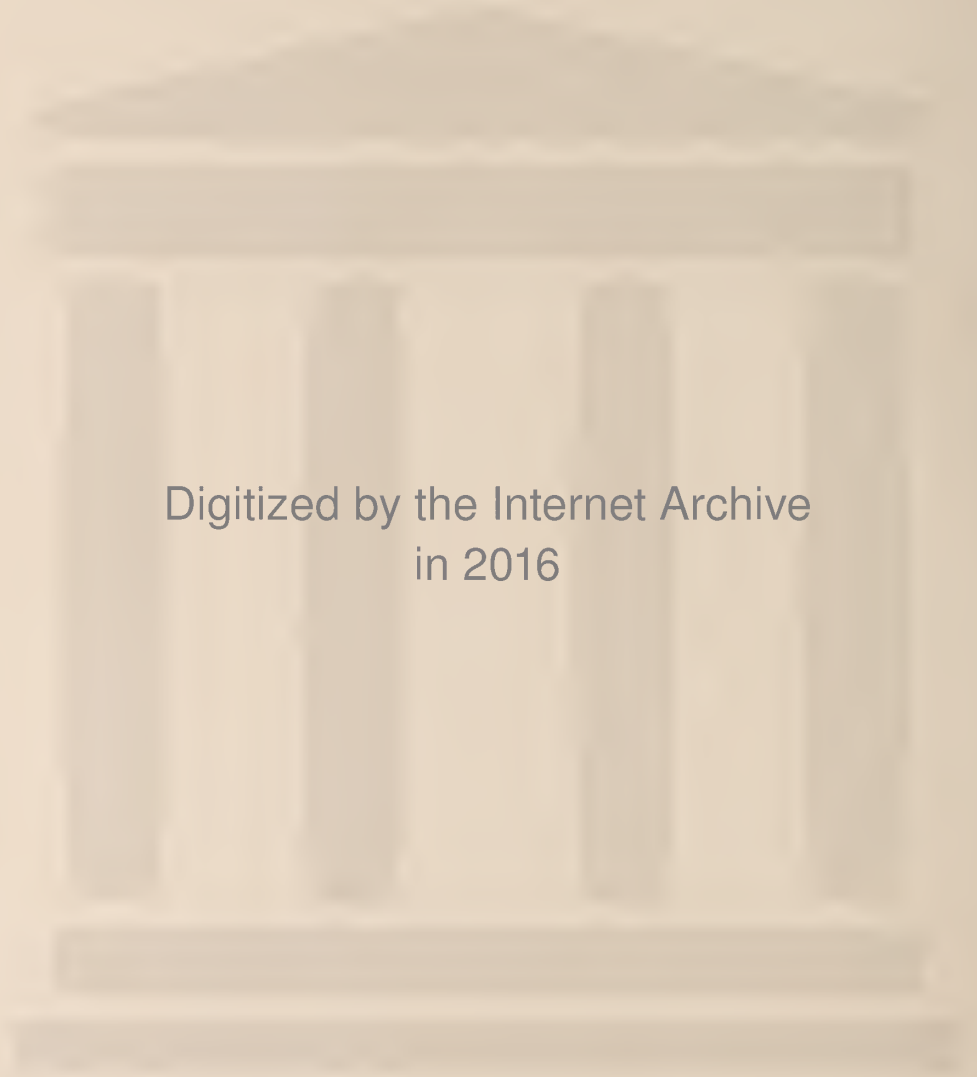
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JANUARY 1968 • VOLUME 66 • NUMBER 1

THE JOURNAL

OF THE KENTUCKY MEDICAL ASSOCIATION



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Jo Anne Sexton, M.D. 37

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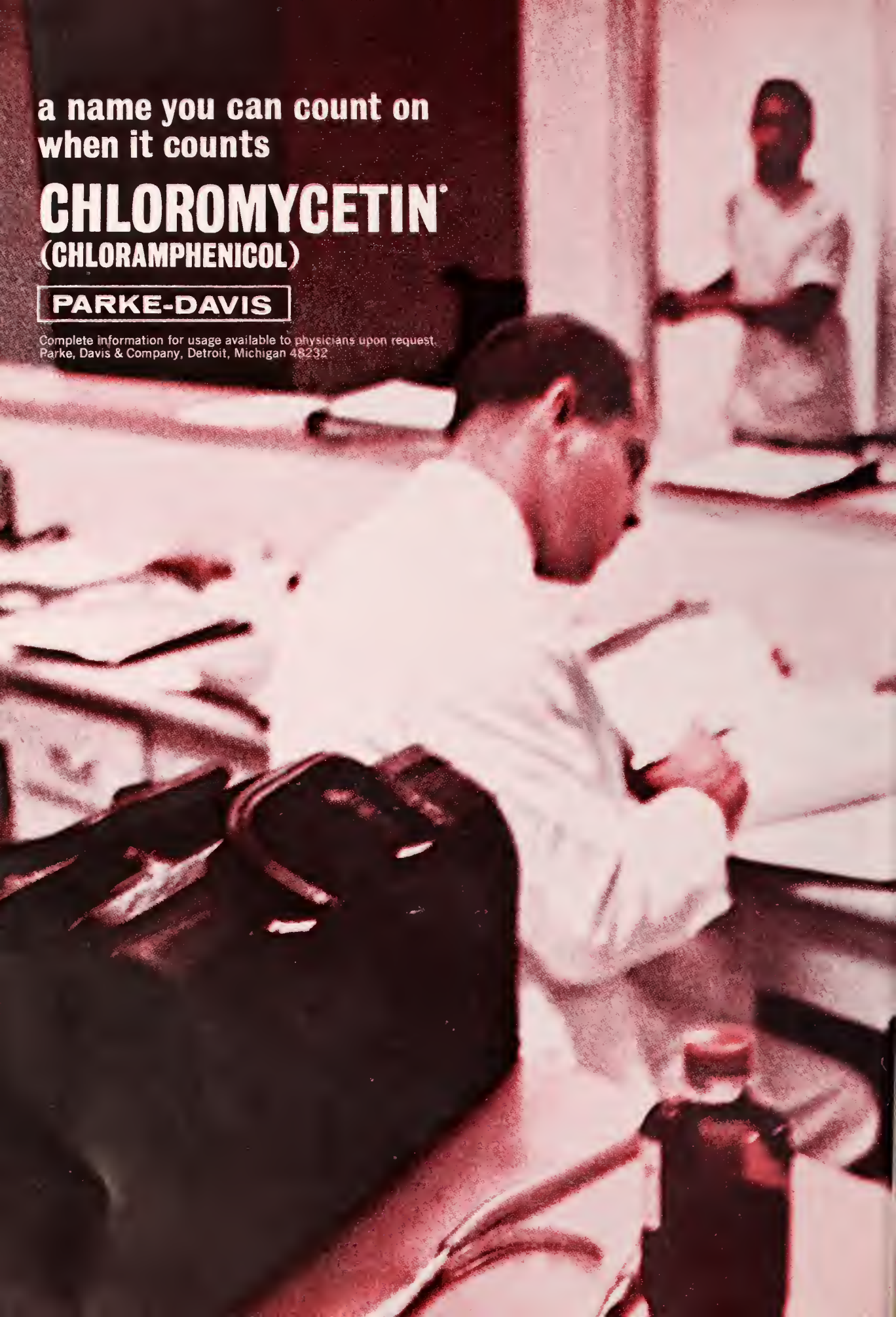
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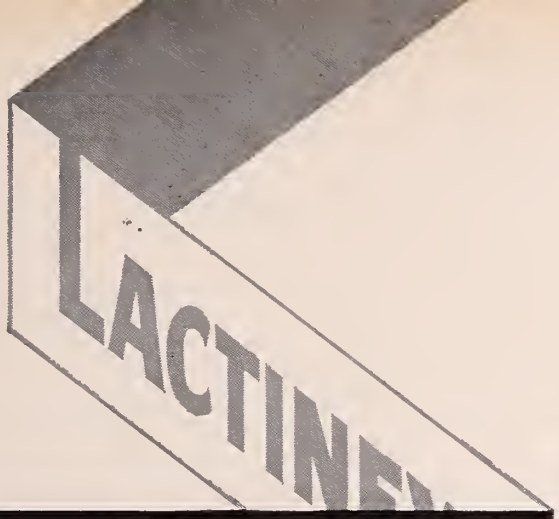
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Summary of Proceedings of AMA House of Delegates 68

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KMA 1968 Interim Meeting
April 17-18
Statler-Hilton Motel, Covington


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References:

(1) Siver, R. H.: CMD, *21*:109, September 1954. (2) Frykman, H. H.: Minn. Med., *38*:19-27, January 1955. (3) McGivney, J.: Tex. State Jour. Med., *51*:16-18, January 1955. (4) Quehl, T. M.: Jour. of Florida Acad. Gen. Prac., *15*:15-16, October 1965. (5) Weekes, D. J.: N.Y. State Jour. Med., *58*:2672-2673, August 1958. (6) Weekes, D. J.: EENT Digest, *25*:47-59, December 1963. (7) Abbott, P. L.: Jour. Oral Surg., Anes., & Hosp. Dental Serv., 310-312, July 1961. (8) Rapoport, L. and Levine, W. I.: Oral Surg., Oral Med. & Oral Path., *20*:591-593, November 1965.

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If your objective in the use of a broad-spectrum antibiotic is prolonged action, with high blood levels, then you know why b.i.d. DECLOMYCIN is considered to be a sensible dosage schedule.

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Prescribing information on next page.

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DECLOMYCIN Demethylchlortetracycline should be equally or more effective therapeutically than other tetracyclines when the offending organisms are tetracycline-sensitive.

Contraindication: History of hypersensitivity to demethylchlortetracycline.

Warning—In renal impairment, usual doses may lead to excessive accumulation and liver toxicity. Under such conditions, lower than usual doses are indicated, and, if therapy is prolonged, serum level determinations may be advisable. A photodynamic reaction to natural or artificial sunlight has been observed. Small amounts of drug and short exposure may produce an exaggerated sunburn reaction which may range from erythema to severe skin manifestations. In a smaller proportion, photoallergic reactions have been reported. Patients should avoid direct exposure to sunlight and discontinue drug at the first evidence of skin discomfort. Necessary subsequent courses of treatment with tetracyclines should be carefully observed.

Precautions—Overgrowth of nonsusceptible organisms may occure. Constant observation is essential. If new infections appear, appropriate measures should be taken. In infants, increased intracranial pressure with bulging fontanels has been observed. All signs and symptoms have disappeared rapidly upon cessation of treatment.

Side Effects—Gastrointestinal system—anorexia, nausea, vomiting, diarrhea, stomatitis, glossitis, enterocolitis, pruritus ani. Skin—maculopapular and erythematous rashes. A rare case of exfoliative dermatitis has been reported. Photosensitivity; onycholysis and discoloration of the nails (rare). Kidney—rise in BUN, apparently dose related. Transient increase in urinary output, sometimes accompanied by thirst (rare). Hypersensitivity reactions—urticaria, angioneurotic edema, anaphylaxis. Teeth— dental staining (yellow-brown) in children of mothers given this drug during the latter half of pregnancy, and in children given the drug during the neonatal period, infancy and early childhood. Enamel hypoplasia has been seen in a few children. If adverse reaction or idiosyncrasy occurs discontinue medication and institute appropriate therapy.

Average Adult Daily Dosage: 150 mg q.i.d. or 300 mg b.i.d. Should be given 1 hour before or 2 hours after meals, since absorption is impaired by the concomitant administration of high calcium content drugs, foods and some dairy products. Treatment of streptococcal infections should continue for 10 days, even though symptoms have subsided.

In the treatment of syphilis a dosage schedule of a total of 12 to 18 Gm. given in equally divided doses over a period of 10 to 15 days should be followed. Close follow-up observation of the patient is recommended, including appropriate laboratory tests, since demethylchlortetracycline has not had adequate evaluation in all stages of syphilis. Spinal fluid examination should be included as part of this follow-up.

Acute gonococcal anterior urethritis in males has been treated effectively with a single dose of 600-900 mg. of DECLOMYCIN Demethylchlortetracycline. Individuals unable to tolerate large single doses due to gastrointestinal side effects may be treated with 150 mg. every 6 hours for a minimum of 4 doses or 300 mg. every 12 hours for a minimum of 2 doses. Females should be treated with a dosage of 150 mg. every 6 hours or 300 mg. every 12 hours until a cure is effected.

Primary Atypical Pneumonia (Eaton Agent): The average adult daily dosage is 900 mg. in 3 divided doses for six days.

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Usual Adult Dosage: **One tablet daily.• To be taken in the morning.**

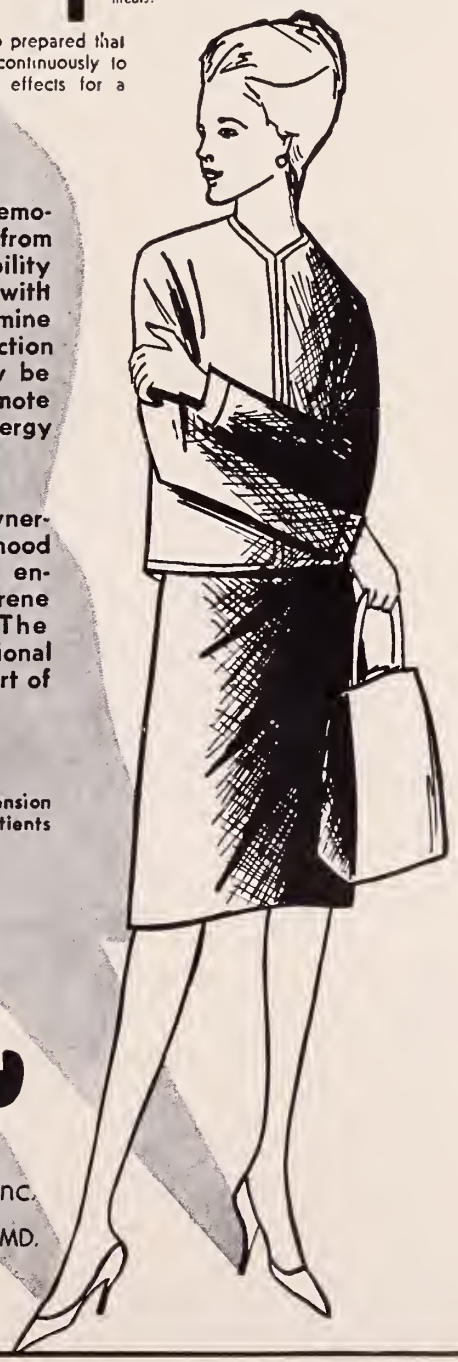
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Usual Adult Dosage: In obesity, 1 tablet t. i. d. 30-60 minutes before meals. In all other conditions, take 1 tablet t. i. d. immediately after meals.

†**STEDYTABS DELFETA-SED** are so prepared that the active ingredients are released continuously to provide for prolonged therapeutic effects for a period of up to 8 to 10 hours.



The dieting obese sometime experience emotional problems as secondary symptoms resulting from restricted food intake: anxiety, depression, irritability and tension. Subjective relief is accomplished with Delfeta-sed (Delfetamine, dl-N-Methylamphetamine HCl) balanced with the mild euphoric sedative action of Sedafax, brand of Amobarbital-Warning: may be habit forming). The mood is altered to promote optimism and impart a cheerful sense of energy and well-being.

IN DEPRESSION: **A completely logical synergistic combination of wide application as a mood normalizer for the common depressed states encountered in everyday practice. Induces a serene outlook without excessive tranquillity. The patient is alert but composed, free from emotional peaks and troughs. Relieves anxiety which is a part of every illness.**

CAUTION:

Contraindicated in the presence of marked hypertension and in cases of coronary or cardiovascular disease; also, in patients hypersensitive to Barbiturates or ephedrine-like drugs.

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MESSAGE FROM THE PRESIDENT



Keeping in Step*

THE word "auxiliary" is defined in the dictionary as:

a. Offering or providing help.

b. Functioning in a subsidiary capacity.

These things, I feel, the Woman's Auxiliary has carried out in the past to the best of its ability. However, instead of "Being on Call," so to speak, we would like to feel we are keeping in step with our medical group.

We fully understand the fact that our organization would not be in existence if it were not for the Kentucky Medical Association. We need your continued guidance and support.

In recent years we have been called upon to speak at the opening session of the House of Delegates, to serve on the committee which makes plans for the Interim Meeting, and to talk to the new doctors at their orientation sessions at the Interim and Annual Meetings.

These assignments have brought our organizations closer together. It is our desire to plan some functions, to be held during the Annual Meeting, which will bring our organizations together in a social way.

We do not have as many members as the state association. You can help us by finding out if your wife is a member of Medical Auxiliary. If not, please encourage her to join today.

MRS. CHARLES C. KISSINGER, PRESIDENT
WOMAN'S AUXILIARY TO THE KMA

**This is the first in a series of articles, written at the request of KMA President George F. Brockman, M.D., by the president of the Woman's Auxiliary to KMA and the three KMA vice-presidents.*



"All Interns are Alike"

It stands to reason. They all go through the same training; they all have to pass the same tests; they all have to measure up to the same standards; they all are underpaid, too. Therefore, all interns are alike.

That's utter nonsense, of course. But it's no more nonsensical than what some people say about aspirin. Namely: since all aspirin is at least supposed to come up to certain required standards, then all aspirin tablets must be alike.

Bayer's standards are far more demanding. In fact, there are at least *nine specific differences* involving purity, potency and speed of tablet disintegration. These Bayer® standards result in significant product benefits including gentleness to the stomach, and product stability that enables Bayer tablets to *stay* strong and gentle until they are taken.

So next time you hear someone say that all aspirin tablets are alike, you can say, with confidence, that it just isn't so.

You might also say that all interns aren't alike, either.



PUBLIC HEALTH PAGE

1968 Revision of Birth, Death and Fetal Death Certificates†

RUSSELL E. TEAGUE, M.D., M.P.H.

Commissioner of Health
Commonwealth of Kentucky

THIS is to introduce to you the new birth, death and fetal death certificate forms and to discuss some of the important changes and background under which they were developed.

The standard certificates of live birth, death, and fetal death have been revised and recommended by the Public Health Service to the states and independent registration areas for use beginning January 1, 1968. Final versions of the standard certificates were prepared by the Division of Vital Statistics, National Center for Health Statistics, after preliminary drafts were reviewed by the Public Health Conference on Records and Statistics. This followed consideration of the advice of state health officers and registrars, local public health officials, federal agencies, physicians and interested professional associations.

This revision is part of a program which periodically assesses the adequacy of current vital records to fulfill their various purposes in the fields of law, medicine, public health and government. The present revision follows by 12 years the last revision of standard certificates, which took effect in 1956. While the new birth certificate adds eight items not on the previous form, nine items from the old certificate have been deleted at the suggestion of physicians and others who helped in the revision process.

It is important to note that the following major organizations have been provided an opportunity to review carefully the proposed changes prior to the adoption of the forms:

E. H. Christopherson, M.D.
Executive Director, American Academy of Pediatrics

Paul F. Beeson, M.D.
Secretary, Association of American Physicians

Craig W. Muckle, M.D.
American Association of Obstetricians and Gynecologists

Edwin L. Crosby, M.D.
American Hospital Association

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American Medical Association

Judith J. Whitaker
Executive Secretary
American Nurses Association

Conrad M. Riley, M.D.
Secretary, American Pediatric Society

Edward Roseman, Jr.
Executive Director, American College of Physicians

Mac F. Cahal, M.D.
Executive Director, American Academy of General Practice

Ben Eiseman, M.D.
Secretary, Society of University Surgeons

Samuel A. Smith
Administrative Secretary
National Medical Association

The information provided on the new birth certificate, particularly as related to birth injuries and congenital malformations, will be quite useful to key medical committees and other medical researchers in accurately identifying problems and solutions. Robert N. McCloud, Jr., M.D., president of the Kentucky Chapter of the American Academy of Pediatrics, states that this new information would be valuable in developing sets of information which will be helpful to medical groups in the prevention and treatment of complications of pregnancy. Guy Cunningham, M.D., chairman, Committee on the Fetus and the New Born, Kentucky Chapter of the American Academy of Pediatrics, also expressed the opinion that this new information on malformations and complications of pregnancy will be quite effective in developing new concepts and analyzing related problems. It is believed, therefore, that medical review bodies and other health organizations throughout the state will find this new information most beneficial.

It can be concluded that medical specialists with interests in mothers and children have indicated their

(Continued on Page 102)

†*This article was prepared by Lewis C. Bush, Director, Office of Vital Statistics, State Department of Health, Commonwealth of Kentucky, 275 East Main Street, Frankfort, Kentucky.*



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takes the nervous edge off the pain ...helps bring out the best in codeine

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Each capsule contains:

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Hyoscyamine sulfate	0.031 mg.
Codeine phosphate	¼ gr. (No. 2), ½ gr. (No. 3), 1 gr. (No. 4)
(Warning: may be habit forming)	

Contraindications: Hypersensitivity to any ingredient.

Precautions: As with all phenacetin-containing products, avoid excessive or prolonged use.

Side Effects: Side effects are uncommon—nausea, constipation, and drowsiness have been reported.

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When the agitated businessman goes to work...

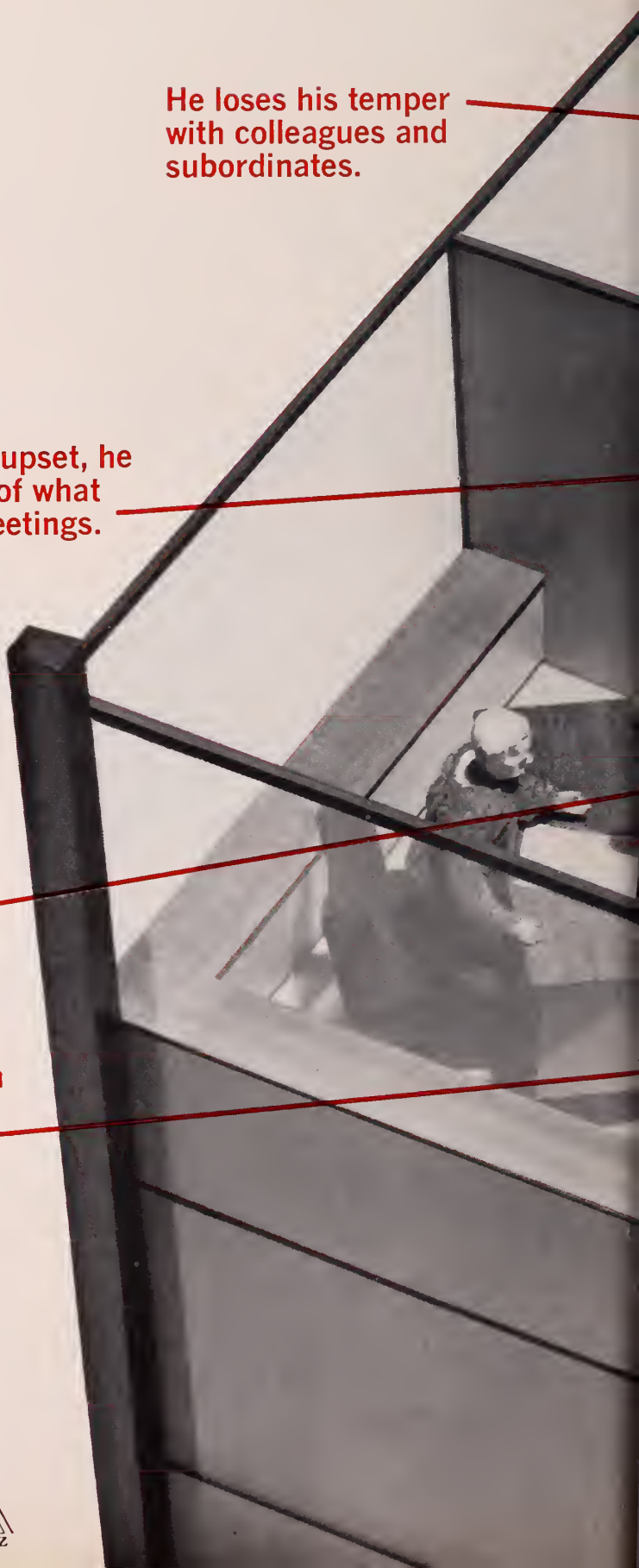
He goes home at night and takes it out on his family.

He loses his temper with colleagues and subordinates.

Emotionally upset, he misses half of what is said at meetings.

He is always fearful about his standing with the boss.

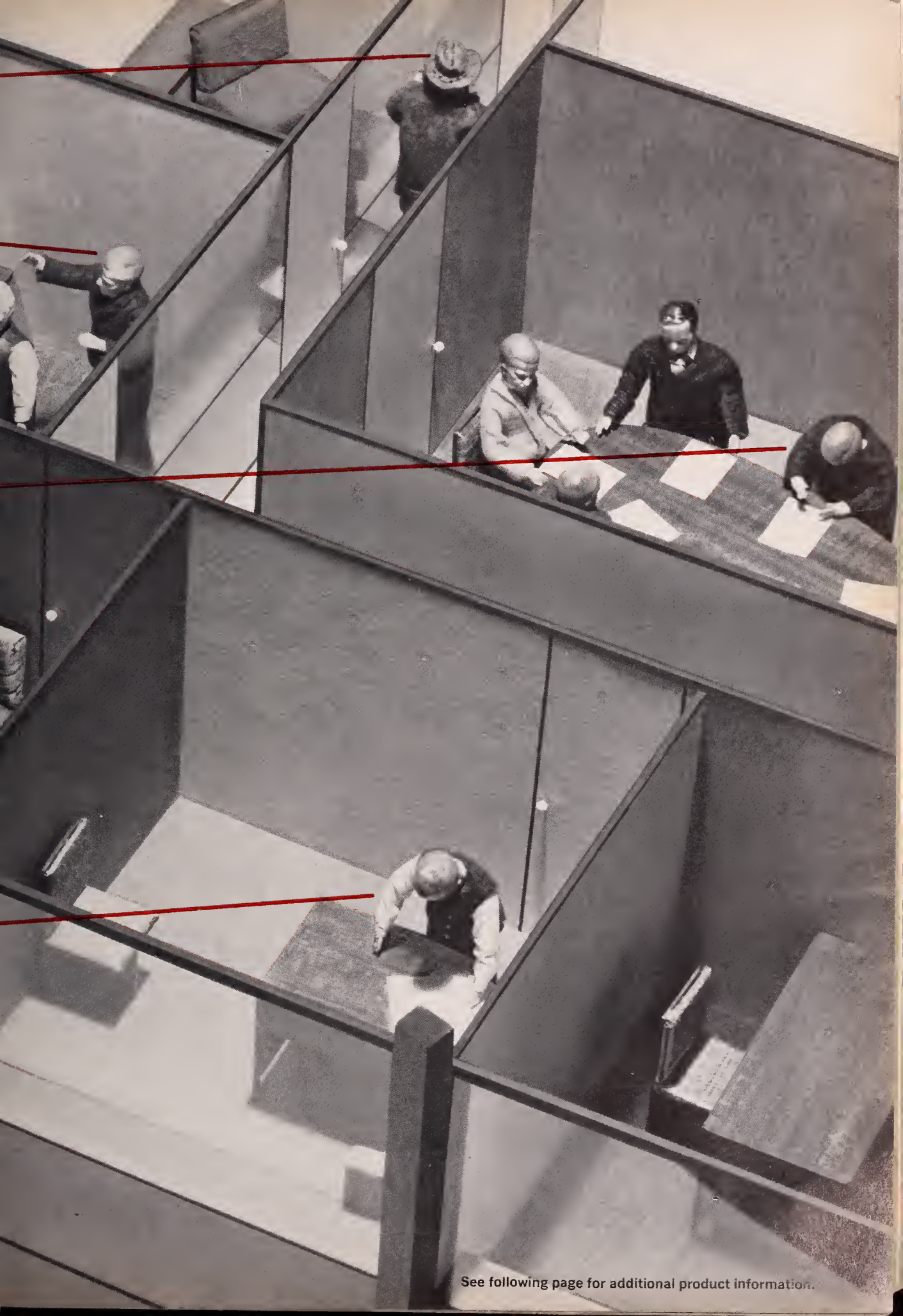
He just can't seem to settle down to his work.



for moderate to severe anxiety

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When the agitated businessman goes to work...

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Mellaril often recommends itself to the treatment of moderate to severe anxiety because it

- helps control the most frequent symptoms: marked tension, agitation, apprehension, restlessness, hypermotility
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- frequently helps strengthen emotional resources
- helps the patient maintain realistic contact with environment, closer harmony with family

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Precautions: Hypersensitivity reactions (e.g., leukopenia, agranulocytosis) and convulsive seizures are infrequent. Pigmentary retinopathy has been observed where doses in excess of those recommended were used for long periods of time. May potentiate central nervous system depressants, atropine, and phosphorus insecticides. Where complete mental alertness is required, administer the drug cautiously and increase dosage gradually. In addition, orthostatic hypotension (especially in female patients) has been observed. Epinephrine should be avoided in treatment of drug-induced hypotension.

Side Effects: Pseudoparkinsonism and other extrapyramidal disorders are infrequent; drowsiness, especially in high doses early in treatment, may occur; nocturnal confusion, dryness of the mouth, nasal stuffiness, headache, peripheral edema, lactation, galactorrhea, and inhibition of ejaculation are noted on occasion; photosensitivity and other allergic skin reactions may occur but are extremely rare.

Before prescribing, see package insert for full product information.

for moderate to severe anxiety

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- ASTHMA
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- BRONCHIECTASIS

The fast-disintegrating uncoated tablet gives relief in 15 minutes

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Potassium Iodide	195 mg.
Aminophylline	130 mg.
Phenobarbital, Caution: May be habit forming...	21 mg.
Ephedrine HCl	16 mg.

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MUDRANE GG ELIXIR—Four 5 cc teaspoonfuls is equivalent to one Mudrane GG tablet. Dosage adjusted to age and weight of child. Mudrane GG Elixir is for pediatric patients and those who think they cannot swallow tablets. Dispensed in pint and half gallon bottles.

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IN KENTUCKY

JANUARY

15 Fifth KMA Trustee District Meeting, 6 p.m., Executive Inn, Louisville

17 Methodist Evangelical Hospital Third Annual Postgraduate Day, Hospital Conference Room, Louisville

18 Obstetrics and Gynecology Grand Rounds, "Operative Management of Complicated Pregnancy," University of Kentucky Medical Center, Lexington

23 Second KMA Trustee District Meeting, 6:30 p.m., Gabe's Restaurant, Owensboro

24 First KMA Trustee District Meeting, 6:30 p.m., Paducah Country Club, Paducah

25 Obstetrics and Gynecology Grand Rounds, "Resuscitation of Newborn," University of Kentucky Medical Center, Lexington

FEBRUARY

1 Obstetrics and Gynecology Grand Rounds, "Care of Newborn," University of Kentucky Medical Center, Lexington

8 Obstetrics and Gynecology Grand Rounds, "Marriage Counseling," University of Kentucky Medical Center, Lexington

10 University of Louisville Oral Cancer Symposium, Rankin Amphitheatre, General Hospital, Louisville

15 Obstetrics and Gynecology Grand Rounds, "Amniotic Fluid Biopsy As Diagnostic Tool," University of Kentucky Medical Center, Lexington

22 Obstetrics and Gynecology Grand Rounds, "Therapeutic Abortion — Management and Related Cytology," University of Kentucky Medical Center, Lexington

29 Obstetrics and Gynecology Grand Rounds, "Hormonal Producing Ovarian Tumors" and "Endometriosis", University of Kentucky Medical Center, Lexington

MARCH

28 Thirteenth Annual Lexington Clinic Conference, Lexington Clinic, Lexington

APRIL

24-25 Kentucky Chapter American Academy of Pediatrics joint meeting with Kentucky Chapter American Academy of Radiology, Park Mammoth Resort, Park City

IN SURROUNDING STATES

JANUARY

17 Post Graduate Symposium in Nuclear Medicine, "Introduction to Nuclear Medicine," Washington University School of Medicine, St. Louis, Mo.

17-18 Cleveland Clinic Educational Foundation Postgraduate Course, "The Treatment of Surgical Emergencies," Bunts Auditorium, Cleveland

18-19 Post Graduate Symposium in Nuclear Medicine, "Progress in Nuclear Medicine," Washington University School of Medicine, St. Louis, Mo.

20-25 American Academy of Orthopaedic Surgeons, Palmer House, Chicago

FEBRUARY

3-4 American Academy of Allergy Postgraduate Course, Statler Hilton Hotel, Boston, Mass.

5-7 American Academy of Allergy 24th Annual Meeting, Statler Hilton Hotel, Boston, Mass.

12 Seventh Annual Alfred K. Nippert Memorial Lecture, "The Emerging Role of the Community Hospital," 8:15 p.m., The Christ Hospital, Cincinnati, Ohio

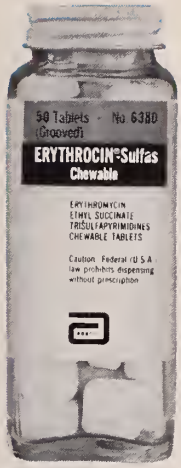
22-24 Central Surgical Association Meeting, Sheraton-Cleveland, Cleveland, Ohio

28-29 "Advances in Pediatrics" Postgraduate Course, Cleveland Clinic Educational Foundation, Cleveland, Ohio



Perhaps there have been times when you wanted to prescribe erythromycin and triple sulfas for little patients. Now you can—with a choice of two new fine-tasting pediatric forms.

New–Two Pediatric Forms of Erythromycin and Triple Sulfas





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linical trials[1,2], this orange-flavored let was given to 55 patients, aged r months to 18 years.

gnoses (multiple in some cases) resented a cross section of bacterial ctions commonly seen in pediatric ce practice.

rapy was given from three to 12 s, with an average of six days.

the 55 patients, 30 were reported ed within 72 hours, while 22 showed tial recovery within the same time, l subsequent clinical cure.

clinical cure rate of 94.5%

ase Reports on File, Dept. Clin. Development, bbott Laboratories.

olley, R.F.L., Use of Erythromycin-Sulfas in Office actice, Western Med., 7:177, July, 1966.

ERYTHROCIN-SULFAS Granules (Erythromycin ethyl succinate-trisulfapyrimidines granules for oral suspension)

87 patients were treated[1,2]—all children, ages four months to 15 years.

The diagnoses were multiple in some cases and were chiefly bacterial infections of the respiratory tract.

Dosage was maintained from three to 10 days; average treatment was five days. All of the ill children accepted the orange-flavored suspension favorably.

53 were clinically cured within 72 hours, while 32 showed partial relief within the same time, and subsequent clinical cure.

701358

A clinical cure rate of 97.7%

ABBOTT

Brief Summary on next page

ERYTHROCIN®-SULFAS
Brief Summary

Contraindications: Known sensitivity to erythromycin or sulfonamides. Because of the possibility of kernicterus with sulfonamides, do not use in pregnancy at term, premature or newborn infants.

Warnings: As with other forms of sulfonamide therapy, carefully evaluate patients with liver or kidney damage, urinary obstruction, or blood dyscrasia. Deaths have been reported from hypersensitivity reactions and blood dyscrasias following use of sulfonamides. Perform blood counts and liver and kidney function tests if used repeatedly at close intervals or for long periods.

Precautions, Side Effects: Occasionally mild abdominal discomfort, nausea or vomiting may occur with erythromycin, generally controlled by reduction of dosage. Mild allergic reactions (such as urticaria and other skin rashes) may occur. Serious allergic reactions have been extremely infrequent. Use sulfonamides with caution in patients with a history of allergy. Assure adequate fluid intake to prevent crystalluria and institute alkali therapy if indicated. If overgrowth of nonsusceptible organisms occurs, withdraw the drug and institute appropriate treatment. If a patient should show signs of hypersensitivity, appropriate countermeasures (e.g. epinephrine, steriods, etc.) should be administered and the drug withdrawn.

Adverse Reactions: Sulfonamide therapy may be associated with headache, nausea, vomiting, urticaria, diarrhea, hepatitis, pancreatitis, blood dyscrasias, neuropathy, drug fever, skin rash, injection of the conjunctiva and sclera, petechiae, purpura, hematuria and crystalluria.

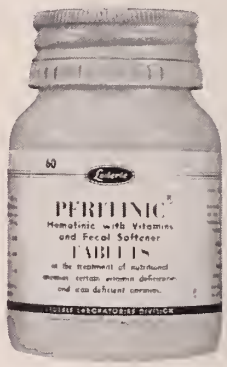
Side effects due to erythromycin are infrequent, but occasional abdominal discomfort, nausea, or vomiting, urticaria and other skin rashes may occur.

Supplied: The Granules for Oral Suspension come in bottles of 60 ml. and 150 ml. The Chewable tablets are in bottles of 50. Each 5-ml. teaspoonful of reconstituted Granules or each Chewable tablet provides erythromycin ethyl succinate equivalent to 125 mg. of erythromycin activity and 167 mg. of each of sulfadiazine, sulfamerazine and sulfamethazine.

701358

ABBOTT

anticostive* hematinic



PERITINIC®

Hematinic with Vitamins and Fecal Softener

A tablet-a-day provides:

• Elemental Iron (as Ferrous Fumarate)	100 mg
• Dioctyl Sodium Sulfosuccinate (to counteract constipating effect of iron)	100 mg
Vitamin B_1	7.5 mg
Vitamin B_2	7.5 mg
Vitamin B_6	7.5 mg
Vitamin B_{12}	50 mcgm
Vitamin C	200 mg
Niacinamide	30 mg
Folic Acid	0.05 mg
Pantothenic Acid	15 mg

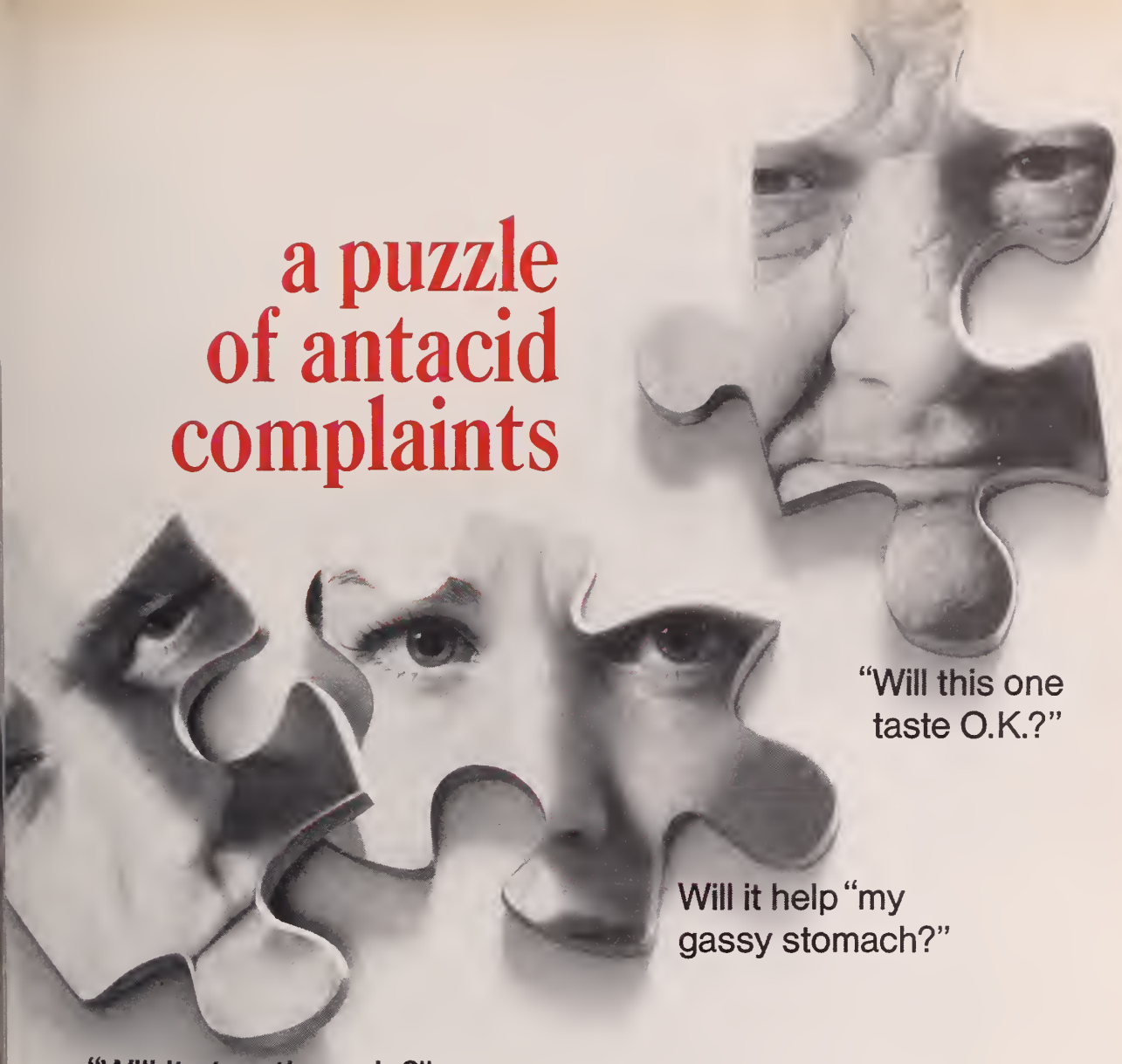
Bottles of 60

* anticostive, *adj.* (*anti* opposed to + *costive* causing constipation.) Against constipation. (Now isn't that a good idea in an iron-containing hematinic? We'll send you samples if you'll send a request on your Rx blank, addressed to Department 150.)

Lederle LEDERLE LABORATORIES
A Division of American Cyanamid Company
Pearl River, New York 10965

488-7—6062

a puzzle of antacid complaints



Mylanta®

aluminum and magnesium hydroxide *plus* simethicone

a solution to peptic ulcer distress

Effective neutralization—
with the two most widely prescribed antacids: aluminum and magnesium hydroxides.

Concomitant relief of G.I. gas distress—
with the proven[1] defoaming action of simethicone.

Prolonged acceptance confirmed—
in 87.5% of 104 patients after a total of 20,459 documented days of therapy.[2]

Composition: Each Mylanta chewable tablet or teaspoonful (5 ml.) contains: magnesium hydroxide, 200 mg.; aluminum hydroxide, dried gel, 200 mg.; simethicone, 20 mg.
Dosage: One or two tablets (well chewed or allowed to dissolve in the mouth) or one or two teaspoonfuls to be taken between meals and at bedtime.

References: 1. Hoon, J.R.: Arch. Surg. *93*:467 (Sept.) 1966.
2. Danhof, I.E., Personal communication.

Stuart

Division/Pasadena, Calif.
ATLAS CHEMICAL INDUSTRIES, INC.

new evidence for TAO® (triacetyl-oleandomycin)

a macrolide antibiotic for the frequently seen respiratory infection in the office and for a problem pathogen* in the hospital.

*Staphylococcus aureus

study I[1]

Results of a 1967 in vitro—in vivo correlation study involving 116 patients with Gram-positive coccal infections in five institutions. All patients were given TAO prior to determining the susceptibility of the offending organism.

97.0%
of the organisms were susceptible to oleandomycin*

98.0%
of the patients responded favorably to TAO® (triacetyloleandomycin)

In some cases more than one pathogenic organism was isolated from the patient.

study II[2]

Effect of oral therapy with TAO, erythromycin, and cloxacillin on the survival time of Rhesus monkeys after intravenous inoculations of lethal doses of staphylococci, phage type 80/81.
(8 monkeys in each group)

conclusion:

*Under the conditions of this study and the doses employed, it was found that

TAO® (triacetyloleandomycin)

was far superior to erythromycin, as was cloxacillin, a bactericidal agent, and of particular interest, "...bacteriostatic triacetyloleandomycin was as effective or perhaps superior to cloxacillin in preventing lethal (staphylococcal, phage type 80/81) infection."

*It should be pointed out that results obtained in an experimental study of this nature may not necessarily be directly extrapolated to the clinical situation as it pertains to man.

AO Rx Information

NDICATIONS: Include streptococci, staphylococci, pneumococci and gonococci. Recommended for acute, severe infections where adequate sensitivity testing has demonstrated susceptibility to this antibiotic and resistance to less toxic agents. **ONTRAINDICATIONS AND PRECAUTIONS:** Not recommended for prophylaxis or in the treatment of infectious processes which may require more than ten days continuous therapy. In view of the possible hepatoxicity of this drug when therapy eyond ten days proves necessary, other less toxic agents should be used. If clinical judgement dictates continuation of herapy for longer periods, serial monitoring of liver profile is recommended, and the drug should be discontinued at the irst evidence of any form of liver abnormality. When treating gonorrhea in which lesions of primary or secondary syphilis re suspected, proper diagnostic procedures, including darkfield examinations, should be followed. In other cases in which oncomitant syphilis is suspected, monthly serological tests should be made for at least four months. Contraindicated in re-existing liver disease or dysfunction, and in individuals hypersensitive to the drug. Although reactions of an allergic ature are infrequent and seldom severe, those of the anaphylactoid type have occurred on rare occasions. When used in treptococcal infections, therapy should be continued for ten days to prevent the development of rheumatic fever or lomerulonephritis. The use of antibiotics may occasionally permit overgrowth of nonsusceptible organisms. A resistant nfection or superinfection requires re-evaluation of the patient's therapy. In the event such occurs with this drug the nedication should be discontinued, and specific antibacterial and supportive therapy instituted.

eferences: 1. Isenberg, H. D.: Clinical Evaluation of Laboratory Guidance to ntibiotic Therapy; Health Laboratory Science (July) 1967. 2. Saslaw, S., Carsle, H. N.: Studies on Therapy of Staphylococcal Infections in Monkeys. . Comparison of Cloxacillin, Triacetyloleandomycin and Erythromycin. Proc. oc. Exp. Biol. & Med.: Vol. 125, No. 4 (Aug.-Sept.) 1967.

J. B. ROERIG DIVISION
CHAS. PFIZER & CO., INC.
235 EAST 42nd STREET
NEW YORK, N.Y. 10017

For your impatient cold patients

Two sprays from NTZ Nasal Spray—and nasal congestion, rhinorrhea, sneezing are reduced for *immediate* comfort for patients with colds.

NTZ is more than a simple vasoconstrictor. It contains:

Neo-Synephrine® **(brand of phenylephrine) HCl 0.5 per cent,** the major component, virtually synonymous with fast, efficient but gentle nasal vasoconstriction on contact.

Thenfadil® **(brand of thenyldiamine) HCl 0.1 per cent,** topical antihistamine for reduction of rhinorrhea, sneezing or itching. It combats the allergic reactions that may occur in colds or sinusitis.

Zephiran® **(brand of benzalkonium, as chloride, refined) 1:5000,** antiseptic preservative and wetting agent to promote penetration and spread of the formula.

NTZ is well tolerated. Used in a cold it may help prevent sinusitis by opening sinus ostia and permitting drainage. It may also be used in sinusitis to help establish drainage.

The spray is best used twice, the second a few minutes after the first, repeated every three or four hours as needed. NTZ is for temporary relief of nasal symptoms, and overdosage should be avoided.

Supplied: NTZ Nasal Spray, plastic squeeze bottles of 20 ml.; NTZ Nasal Solution, bottles of 30 ml. (1 fl. oz.) with dropper.

Winthrop

Winthrop Laboratories
New York, N.Y. 10016



NTZ®
NASAL SPRAY

relieves
nasal symptoms
on contact

Don't let monilia cut broad-spectrum therapy short...

start with Tetrex-F®

tetracycline phosphate complex-nystatin

Use of broad-spectrum antibiotics can cause fungal overgrowth in the alimentary tract... and give rise to symptoms so troublesome that therapy must be prematurely stopped. Tetrex-F (tetracycline phosphate complex-nystatin) helps you circumvent this problem.

The nystatin can prevent overgrowth of monilia; the phosphate complex delivers tetracycline to the blood rapidly. Side effects are infrequent.

High-Risk Patients

Tetrex-F (tetracycline phosphate complex-nystatin) is especially useful in patients most susceptible to fungal overgrowth during tetracycline therapy: (1) the elderly or debilitated, (2) young children, (3) the diabetic, (4) those on long-term tetracycline therapy, (5) those on steroid therapy, (6) those who have had moniliasis before, and (7) pregnant patients with a history of monilial vaginitis.

When you start with economical Tetrex-F (tetracycline phosphate complex-nystatin), you can complete the full course of broad-spectrum therapy with less chance of losing control elsewhere. A good start for a healthy finish.

PRESCRIBING INFORMATION. For complete information consult Official Package Circular. *Indications:* Infections of respiratory, gastrointestinal and genitourinary tracts and skin and soft tissues due to tetracycline-sensitive organisms, in patients with increased susceptibility to monilial infections. *Contraindications:* The drug is contraindicated in patients hypersensitive to its components. *Warnings:* Photodynamic reactions have been produced by tetracyclines. Natural and artificial sunlight should be avoided during therapy. Stop treatment if skin discomfort occurs. With renal impairment, systemic accumulation and hepatotoxicity may occur. In this situation, lower doses should be used. Tooth staining and enamel hypoplasia may be induced during tooth development (last trimester of pregnancy, neonatal period and childhood). *Precautions:* Bacterial superinfections may occur. Infants may develop increased intracranial pressure with bulging fontanels. In gonorrheal therapy, serologic tests for syphilis should be conducted initially and monthly for 3 months. *Adverse Reactions:* Glossitis, stomatitis, nausea, diarrhea, flatulence, proctitis, vaginitis, dermatitis, and allergic reactions may occur. *Usual Adult Dosage:* 1 capsule q.i.d. Continue for 10 days in Beta-hemolytic streptococcal infections. Administer one hour before or two hours after meals. *Supplied:* Capsules, bottles of 16 and 100. Each capsule contains tetracycline phosphate complex equivalent to 250 mg. tetracycline HCl activity and 250,000 units of nystatin. For Oral Suspension, 125 mg. tetracycline and 125,000 u. nystatin 5 ml., 60 ml. bottles.

BRISTOL

BRISTOL LABORATORIES
Division of Bristol-Myers Company
Syracuse, New York 13201

Optimil
20

Optimil®

THE OPTIMUM-NUTRITION INFANT FORMULA

OPTIMUM CONTENTMENT

New Optimil's marked superiority in achieving satiety — reflected by infants' infrequent crying — is most reassuring to mothers.

Excessive appetite and inordinate crying in the infant are symptoms of essential fatty-acid deficiency. There may be insufficient linoleic acid in the diet, or the conversion of linoleic to metabolically-active arachidonic acid may be blocked by an inhibitory fatty acid. Optimil maintains optimum tissue levels of arachidonic acid by providing linoleic acid at 9% of total calories, with only a trace of linolenic acid, the potent blocking agent.[1-5]

OPTIMUM DIGESTIBILITY

New Optimil provides protein, fat and carbohydrate in kinds and amounts more consistent with the infant's needs. Spitting-up is minimized and skin integrity maximized.

Human milk is still the ideal food for human infants, and Optimil is closer in balance of major nutrients than any competitive infant feeding. Optimil contains a high level of unsaturated fat (58%), a low level of stearic acid (2%), the least digestible fatty acid, and an ample level of oleic acid (40%) to enhance absorption of unsaturated fatty acids.[6] (Fat retention of Optimil is over 90%.) Processing of Optimil protein produces minimum curd tension.

OPTIMUM GROWTH

New Optimil's superior nutritional balance of major nutrients and their components provides highest caloric efficiency. Optimum protein and mineral content assures lowest renal solute load.

Because Optimil is so similar to human milk and maintains high tissue levels of arachidonic acid, it offers superior caloric efficiency for optimum growth. The protein and mineral content is lower than that of any competitive infant formula. Therefore the osmolarity of Optimil is also the lowest. This extended formula has demonstrated its ability to provide optimum growth in comparative studies with leading modified-milk infant formulas.[7-9]

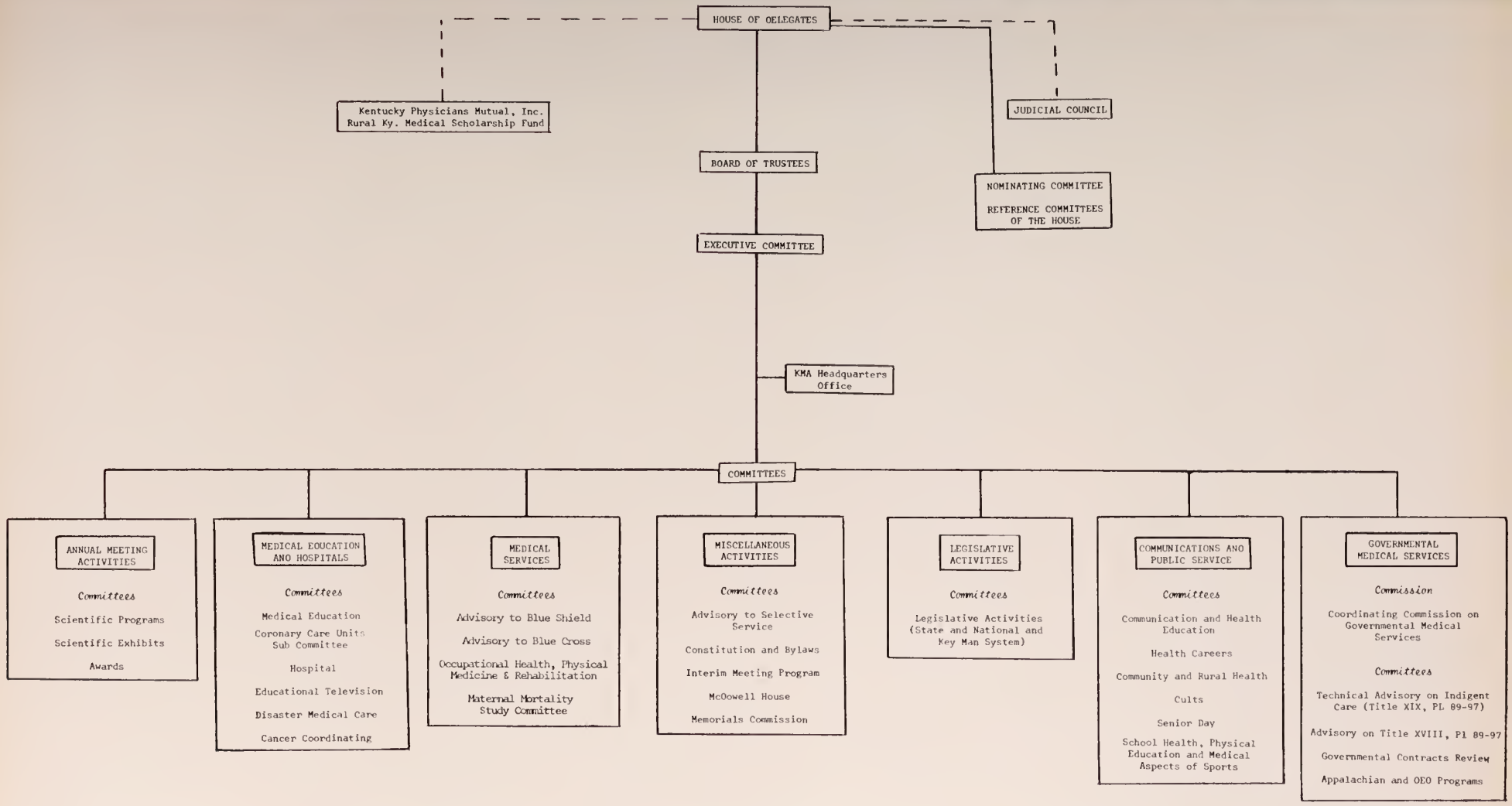
Optimil is available for your specification at leading drugstores in the new, full 16-fluid-ounce can. Dilutes 1 to 1 with water to provide a full quart of formula, a full day's supply.

1. Hepner, R., et al.: Pediatrics 33:94, 1964. 2. Hepner, R., et al.: Pediatrics (to be published). 3. Hansen, A. E., et al.: Pediatrics 31:171, 1963. 4. Holman, R. T.: Fed. Proceed. 23:1062. 1964. 5. Holman, R. T., et al.: Amer. J. Clin. Nut. 14:83, 1964. 6. Young, R. J., and Garrett, R. L.: J. Nut. 81:321, 1963. 7. Hepner, R.: "New Perspectives on Nutritional Aspects of Modified Milk-Fat Formulas," a colloquium held under the auspices of The Pediatric Department, Western Reserve University School of Medicine, Cleveland, Ohio, Sept. 8, 1966. 8. Carson, M., and Hart, L.: ibid. 9. Nichols, M.: ibid.



Optimil, the first optimum-nutrition infant formula

from a world leader in nutritional research... Carnation®



KMA Organization Chart–Revised September 27, 1967

When the talk turns to oral contraceptives, it makes medical sense to remember low-dose Norinyl®-1.

(norethindrone 1mg. & mestranol 0.05mg.)

Turn page for contraindications, precautions and side effects.



Reduction of oral contraceptive dosage to the lowest effective levels is a well-accepted principle of conservative medical practice. In keeping with this view, Norinyl is now also available as Norinyl-1, containing exactly one half the previous dosage of norethindrone and mestranol. Clinical experience has established that effective fertility control can be achieved with the same degree of reliability and safety with new Norinyl-1 when taken as directed.

What about switching patients from higher dosage forms?

In transferring patients to low-dose Norinyl-1 from higher-dosage oral contraceptives, some breakthrough bleeding may occur in the early cycles. In the majority of cases the bleeding episode is mild and self-limited. The long-term advantages of the lower dosage form should be weighed against the inconvenience of possible breakthrough bleeding in the individual patient.

Prescribing Information

Contraindications: Patients with any symptoms or history of thrombophlebitis, pulmonary embolism, liver dysfunction or disease, carcinoma of breast or genital organs, or undiagnosed vaginal bleeding.

Warnings: Discontinue medication pending examination if there is sudden partial or complete loss of vision, proptosis, diplopia or migraine. If examination reveals papilledema or retinal vascular lesions, medication should be withdrawn. The safety of Norinyl-1 in pregnancy has not been demonstrated. If a patient misses two consecutive periods, pregnancy should be ruled out before continuing the medication. If she has not adhered to the prescribed schedule, pregnancy should be considered at the first missed period. Active ingredients of oral contraceptives have been detected in the milk of mothers who received these drugs; the significance to infants has not been determined.

Precautions: Pretreatment physical should include examination of the breasts and pelvic organs, as well as a Papanicolaou smear. If endocrine or liver function tests are abnormal during therapy, repeat tests are recommended after the drug has been withdrawn for two months. Following administration of drug, preexisting uterine fibromyomata may increase in size. Careful observation and caution are required for patients with symptoms or history of epilepsy, migraine, asthma, cardiac or renal dysfunction, cerebrovascular accident, psychic depression, and diabetes. In cases of undiagnosed vaginal bleeding, adequate diagnostic measures are indicated. Possible long-term effects of the drug on pituitary, ovarian, adrenal, hepatic or uterine function must await further studies. The physician should be alert to the earliest manifestations of thrombophlebitis and pulmonary embolism. The drug should be used judiciously in those young patients in whom bone growth is not complete. The age of the patient constitutes no absolute limiting factor, although treatment with Norinyl-1 may mask symptoms of the climacteric. The pathologist should be advised of Norinyl-1 therapy when relevant specimens are submitted.

Side Effects: The following have been observed with varying incidence in patients receiving oral contraceptives: nausea, vomiting, gastrointestinal symptoms, breakthrough bleeding, spotting, change in menstrual flow, amenorrhea, edema, chloasma or melasma, breast changes (tenderness, enlargement and secretion), change in weight (increase or decrease), changes in cervical erosion and cervical secretions, suppression of lactation when given immediately postpartum, cholestatic jaundice, migraine, rash (allergic), rise in blood pressure in susceptible individuals, mental depression. Although the following side effects have been reported in users of oral contraceptives, no cause and effect relationship has been established: anovulation posttreatment, premenstruallike syndrome, changes in libido, changes in appetite, cystitislike syndrome, headache, nervousness, dizziness, fatigue, backache, hirsutism, loss of scalp hair, erythema multiforme, erythema nodosum, hemorrhagic eruption, and itching. The following occurrences have been observed in users of oral contraceptives (a cause and effect relationship has neither been established nor disproved): thrombophlebitis, pulmonary embolism, neuroocular lesions.

The following laboratory tests may be altered by the use of oral contraceptives: increased sulfobromophthalein and other hepatic function tests, coagulation tests (increase in prothrombin, factors VII, VIII, IX and X), thyroid function (increase in PBI and butanol extractable protein bound iodine and decrease in T^3 values), metyrapone test, pregnanediol determination.

norethindrone — an original steroid from

SYNTEX

LABORATORIES INC., PALO ALTO, CALIF.

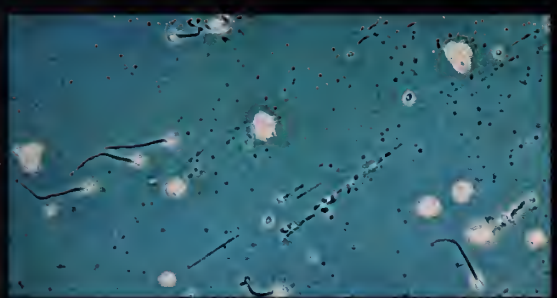
Here's why Norinyl-1 makes medical sense.

The effectiveness of Norinyl-1 as a low-dose oral contraceptive may be explained by its possible multiple action. In addition to its primary action of suppression of ovulation, Norinyl-1 may offer additional protective mechanisms... (1) creation of a cervical mucus that may be hostile to sperm penetration, and (2) development of an endometrium that may be out of phase with nidation. These effects are illustrated below.

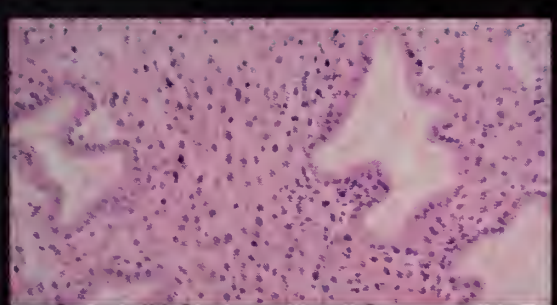
Untreated Patient



Cervical mucus at midcycle is usually thin and watery, with Spinnbarkeit (stretchability) of 15 to 20 cm.



Spermatozoa appear healthy, active, freemoving.

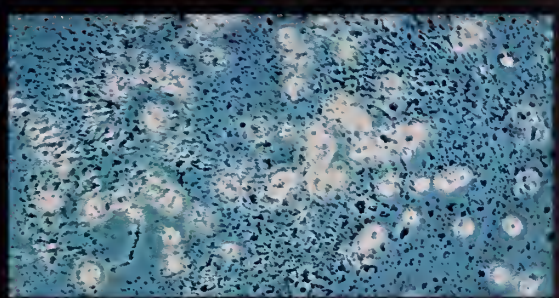


Endometrium of untreated patient is receptive to the fertilized ovum during secretory phase.

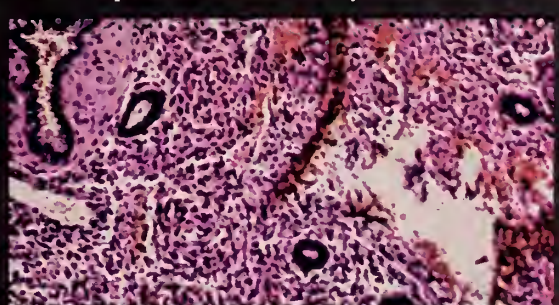
Norinyl-1 Patient



Cervical mucus at midcycle is scanty, viscous—with Spinnbarkeit of 1 cm. or less.



Immobile spermatozoa as they appear in cervical mucus taken from patient treated with Norinyl-1.



Norethindrone in Norinyl-1 accelerates secretory phase, suppresses glandular and vascular development.

Norinyl®-1 tablets
(norethindrone 1mg. & mestranol 0.05mg.)

- new low dose of time-proved ingredients
- established norethindrone/mestranol ratio
- lower patient cost

An uncommon steroid for common inflammatory dermatoses

In everyday topical steroid therapy, Synalar produces rapid resolution of inflammation and itching in steroid-responsive dermatoses—and at relatively low cost to the patient.

Advanced molecular design enhances potency

Synalar combines the advantage of earlier corticosteroid compounds with unique structural innovations. As a result, preparations of Synalar 0.01% and Synalar 0.025% have been reported to be more potent topically and significantly more effective than hydrocortisone 1.0%. The unique fluocinolone acetonide molecule provides one of the most useful topical corticosteroids for everyday practice.

Impressive clinical results in a wide range of dermatologic problems

The clinical efficacy of Synalar has been extensively documented in the world literature. Commonly encountered diseases such as allergic and contact dermatitis, eczematous and seborrheic dermatitis, and neurodermatitis respond rapidly to Synalar, often where previous therapy with other topical corticosteroids has failed.

Low patient cost for wider usefulness

With Synalar, a high degree of efficacy does not mean high price. And—a small quantity goes a long way. Thus, your patients can often obtain the "economy" of a hydrocortisone preparation with the proved efficacy of a potent, truly advanced steroid.

Synalar®
fluocinolone acetonide





Turn page for contraindications, precautions and side effects

For everyday topical steroid therapy

Synalar® 0.01%

fluocinolone acetonide provides economy in two practical dosage forms

For general use, the most economical and widely applicable concentration of Synalar is 0.01% Cream in a water-washable, vanishing cream base. Synalar Solution 0.01% is especially valuable in dermatoses involving moist, intertriginous areas or hairy sites where creams and ointments do not spread or penetrate readily. Synalar Solution is a unique dosage form—clear, nongreasy, cosmetically elegant.

Product Information

Contraindications: Tuberculous, fungal, and most viral lesions of the skin (including herpes simplex, vaccinia, and varicella). Not for ophthalmic use. Contraindicated in individuals with a history of hypersensitivity to any of the components. *Precautions:* Synalar preparations are virtually nonsensitizing and nonirritating. However, the solution may produce burning or stinging when applied to denuded or fissured areas. In some patients with dry lesions, the solution may increase dryness, scaling or itching. Where severe local infection or systemic infection exists, the use of systemic antibiotics should be considered, based on susceptibility testing. While topical steroids have not been reported to have an adverse effect on pregnancy, the safety of their use on pregnant females has not absolutely been established. Therefore, they should not be used extensively on pregnant patients, in large amounts, or for prolonged periods of time. *Side Effects:* Side effects are uncommon with topical corticosteroids. As with all drugs, however, a few patients may react unfavorably to Synalar under certain conditions. In such cases the agent should be discontinued and appropriate measures taken. *Availability:* Synalar (fluocinolone acetonide) Cream 0.025%—5, 15 and 60 Gm. tubes and 425 Gm. jars. Cream 0.01%—15, 45 and 60 Gm. tubes and 120 Gm. jars. Solution 0.01%—20 and 60 cc. plastic squeeze bottles. Ointment 0.025%—15 and 60 Gm. tubes. Neo-Synalar® (neomycin sulfate 0.5% [0.35% neomycin base], fluocinolone acetonide 0.025%) Cream—5, 15 and 60 Gm. tubes.

fluocinolone acetonide—an original steroid from

SYNTEX LABORATORIES INC., PALO ALTO, CALIF.



If hypothyroidism leaves your patient feeling like this...

consider

LETTER®

(SODIUM LEVOTHYROXINE, ARMOUR) TABLETS

Synthetic Thyroid Replacement Therapy



Letter® provides all the advantages of the synthetically pure chemical sodium levothyroxine. Dosage is precise and potency is consistently uniform.

and

Letter® is micronized to provide maximum opportunity for full absorption and clinical response.

In addition Letter® is distinctively color coded with an identifying number stamped on each tablet to provide accurate dosage control.

Indications: Hypothyroid conditions. **Contraindications:** Thyrotoxicosis, acute myocardial infarctions unless associated with hypothyroidism. In hypothyroidism with hypoadrenalism coadministration of corticoids with LETTER® is recommended. **Precautions and Side Effects:** Excessive dosage may result in diarrhea, cramps, palpitation, nervousness, rapid pulse, sweating. If symptoms appear, discontinue medication for several days, then reinstitute at a lower level. Since myxedema patients with heart disease may suffer seriously from abrupt increases in dosage, caution should be exercised in adjusting dosage. **Dosage:** Generally, the initial adult dosage is 0.1 mg. daily. This may be increased in small increments every one to three weeks until proper metabolic balance is achieved. **Available:** Bottles of 100 tablets, in six potencies: 0.025 mg. (violet), 0.05 mg. (peach), 0.1 mg. (pink), 0.2 mg. (green), 0.3 mg. (yellow), and 0.5 mg. (white).

ARMOUR PHARMACEUTICAL COMPANY • CHICAGO, ILLINOIS



Indications: Tofrānil is recommended for the treatment of depressive states of diverse psychopathology.
Contraindications: The concomitant use of Tofrānil and monoamine oxidase inhibiting (M.A.O.I.) compounds is contraindicated. Hyperpyretic crises or severe convulsive seizures may occur. Potentiation of adverse effects can be serious or even fatal. An interval of at least 7 days after M.A.O.I. therapy has been discontinued should be allowed before Tofrānil may be substituted. Initial Tofrānil dosage should be low, increases should be gradual, and the patient's progress should be carefully observed.
Warning: Clinical reports have suggested that there may be a risk of teratogenesis associated with the use of this compound during the first trimester of pregnancy. Unless, in the opinion of the prescribing physician, the potential benefits outweigh the possible risks, Tofrānil should not be used during the first trimester of pregnancy.
Cardiovascular complications, including myocardial infarction and arrhythmias, have occasionally occurred in susceptible individuals. Patients with cardiovascular disease should be given the drug only under careful observation and in low dosage.
Precautions: Since suicide is always a possibility in severely depressed patients and one which may persist until significant remission occurs, such patients should be carefully supervised during early treatment with Tofrānil. Some severely depressed patients may also require hospitalization and/or concomitant electroconvulsive therapy.
Because of its anticholinergic effect, caution should be observed in prescribing Tofrānil for patients with increased intraocular pressure.
In rare instances, transient card
arrhythmias have occurred in hy
thyroid patients and in patients
ceiving thyroid medication wher
Tofrānil was added to the regim
Imipramine may block the pharr
cologic activity of guanethidine
other related adrenergic neuror
blocking agents.
The drug is not recommended a
present time in patients under 1
of age.
Adverse Reactions: Dryness of
mouth, tachycardia, constipatio
turbances of accommodation, s
ing, dizziness, weight gain, urin
frequency or retention, nausea
vomiting, peripheral neuritis, m
parkinson-like syndrome, tremo
rare cases of falling in elderly p
tients, confusional states (with
symptoms as hallucinations an
orientation), activation of psycl
schizophrenics and agitation (i

When a milestone in life is marred by depression...



Often in the mind of the lonely, widowed, depression-prone individual, she's not gaining a daughter...she's losing a son. The occasion may be marred by such symptoms of depression as feelings of sadness, incapacity, helplessness and hopelessness.

In about 3 out of 4 cases, Tofrānil relieves symptoms of primary depression.

As maintenance therapy in primary depressive illness, it helps prevent relapse.

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The Physician's Role in Learning Disorders

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Many of the acute, life-threatening pediatric problems of a generation or two ago have now been largely conquered. Learning disorders, or school failure remain as a perplexing problem to physicians caring for school age children. With some interest and experience, the physician can soon familiarize himself with the various causes of school failure.

A GENERATION or two ago the child who showed little aptitude for learning would have left school after a few semesters in order to learn a trade. He might have become successful as a wage earner and member of his community. No embarrassing diagnostic label would have been attached to his poor school achievement.

In the United States today children are required to attend school until their mid-teens, and much emphasis is placed upon school progress. Failure to pass third grade reading may imperil the child's entire school career and may throw parents and pupil into a state of panic.

When school problems arise the family may turn first to the child's physician. All too often the family doctor or pediatrician has only a vague concept of causes and types of learning disorders. He may be at a loss as to how to diagnose the problem, or to know where the child should be sent for help. If the physician graduated from medical school as much as eight or ten years ago it is likely that he was led to look upon learning disorders as educational problems, hence out of his realm. Indeed, some medical schools today are glossing over this important aspect of child neurology. It needs to be stressed anew that the learning process, being a function of the brain, is a physiological process.

Now that infectious diseases and numerous other life-threatening disorders of childhood have largely been conquered, the physician who cares for children has an opportunity to broaden his interests to encompass the needs of the whole child. Certainly few activities of the school age child are as time-consuming or as important to his future life adjustment as classroom experiences. The doctor who fails to consider this phase of his patient's life will fall short of fulfilling his responsibility to the patient. Further, he will be depriving himself of an opportunity to grapple with this important, and still mysterious question of how normal children learn, and why deviations in the learning process occur.

Although the evaluation of a child for learning disorders is a time-consuming process, the physician will not want to relegate the matter of diagnosis entirely to other professionals such as teachers, psychologists, and social workers. Each discipline has something to offer to the understanding of learning problems. The medical aspects of learning disorders are of primary importance, however. Unfortunately, there are too few pediatricians and neurologists with knowledge and interest in this field. The family doctor must become involved in the problems if more than a fraction of children

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with learning problems are to receive medical evaluations.

Information as to the causes of learning disturbances has been acquired slowly. This is largely due to the fact that most studies of growth and development follow the child only through infancy or to school age. Somatic growth is given primary emphasis over mental and social development. Most combined obstetric-pediatric conferences consider the child only while he remains in the newborn nursery. Babies who had "problems" during the neonatal period are generally followed for only a few months. Although it is now known that a significant number of these who appear normal at one or two years of age will have trouble in the classroom,[1] few long-term studies are available to allow for cause and effect estimations.

The search for diagnostic clues in children with neurological problems is a continuing process. Hence, most of the following "causes" of learning disorders are actually symptoms. One must ask, "Mental retardation, due to what cause?" Similar questions must be asked of all these diagnostic labels. With this reservation in mind, the more common direct causes of learning disturbances are as follows:

(1) Mental retardation—estimated 3 percent of all children[11]
(2) Perceptual problems
(3) Hyperactive, distractible behavior
(4) Epilepsy
    (a) uncontrolled seizures
    (b) improperly regulated medication
(5) Motor impairment
(6) Emotional disturbances

Mental Retardation

At first glance, this common cause of learning problems would appear obvious. It is true that the more severely retarded children have generally been identified before school age. Frequently, however, the diagnosis of mental retardation is not suspected by the parents or doctor of the child who is mildly limited. The more closely the child approaches the norm, the more likely he is to function adequately in his preschool years. Although the possibility of mental retardation should be considered in any child who is having trouble with his school subjects, this possibility may not dawn upon those responsible for his care until after he has failed two or three grades. By then emotional disturbances may have arisen as the result of repeated failure. By this time, parents, teachers and physicians have usually overlooked some important diagnostic clues.

The need for early diagnosis of mental retardation is evident. Early parental acceptance of the problem and proper school placement are necessary if emotional disorders are to be avoided. If the child wastes two or three years of his school life in an unsuitable classroom setting, his opportunity for maximum educational benefits is not provided. He will then fail to achieve as expected for his mental age.

It is estimated that 85 percent of all retarded children are in the mildly retarded or educable category.[11] These children usually do poorly in a regular classroom. Most of these can, with appropriate educational facilities, acquire the equivalent of several years of elementary education.

As with other medical conditions, diagnosis of mental retardation begins with complete history and physical examination. In many pediatric histories, detailed consideration of prenatal course, delivery, and developmental "milestones" is often omitted. "Growth and development" is too often interpreted as somatic growth, while the more important subject of mental and neurological development is glossed over.

The physician will want to familiarize himself with several of the important developmental milestones. Some excellent texts are available on the subject.[12,13] Knowledge of normal time of appearance of social smile, head control and the further developmental accomplishments will enable the doctor to know when closer observation or further evaluation may be in order. It is important to record these milestones on the child's chart so that undue delay in suspecting correctable defects, such as deafness or visual disturbances, does not occur. If the child is retarded, he can be placed in a suitable classroom setting from the beginning of his school career.

Perceptual Problems

Perceptual problems are usually discussed in association with children of normal overall intelligence. Obviously, the retarded child may also do relatively worse in certain areas of learning than in others. For educational pur-

poses, the "perceptually handicapped child" is generally defined as the child with normal IQ scores, but with specific learning problems.

Much confusion has arisen as to these common types of learning problems. One outstanding pitfall is the tendency to place all perceptually handicapped children in the same category. Since the pioneering work of Lehtinen and Strauss,[20] there has been a regrettable tendency to ascribe a variety of symptoms to all children with perceptual problems. In some instances this grouping of symptoms is little more logical than saying, "All patients with pneumonia have brown eyes".

Some symptoms indiscriminately attributed to the pupil with perceptual problems include:

hyperactive, distractible behavior
incomplete hand dominance
poor coordination
visual-motor problems
emotional lability

A child with perceptual problems may have all or none of the above symptoms.

Our knowledge of how normal children learn is still rudimentary. It is stated that we learn through three major pathways: the visual, the auditory, and the kinesthetic. The pupil may have difficulty learning in one or more of these pathways. Manifestations of his learning disability depend upon which learning pathway is primarily defective.

A. Visual Perception

The visual pathway, for most of us, is the most important channel of learning. This modality includes not only vision per se, but visual perception and visual memory. It is closely allied with visual-motor coordination.

Visual perception allows an individual to see parts as a whole, and to distinguish the important figure in a scene or picture from the background. Visual memory enables him to remember patterns and visual symbols. Both attributes are necessary to the child if he is to learn to read. It would appear that the Chinese or Japanese child, who must memorize hundreds of visual symbols in order to read, must develop an excellent visual memory. The child who has difficulty remembering patterns of the printed word is sometimes called "word-blind".

It is possible to get a clue to visual perceptual problems by having the child do a few simple paper and pencil tests. These include asking him to write his name, the alphabet (depending on the age of the child), and numbers to 20 and to draw a person. He may be asked to copy simple geometric figures, or Bender-Gestalt drawings may be given.[2] The pupil with difficulty in this realm tends to reverse letters and numbers and to distort drawings.

In the experience of this author, visual perceptual problems are more often associated with a history of cerebral insult and with objective signs of neurological impairment than are the other perceptual problems. Related symptoms, such as hyperactivity, poor coordination, incompletely developed hand dominance, and visual disturbances may be present. Although visual pathway problems are probably not as common as some of the other perceptual problems, they are apparently more widely recognized than the other perceptual disorders. From reading literature and attending conferences on the subject, one gets the impression that many educators and psychologists are thinking solely of this disorder whenever they use the term "perceptual handicap". Tests which are given to identify children with perceptual problems often appear to check only visual memory and perception, and visual-motor skills.

Special education classes will be needed for most children with visual perceptual problems. Attention should be given to related medical disorders, such as visual disturbances or hyperactive, distractible behavior. Medication is often of considerable benefit in the latter condition, as will be discussed later.

B. Auditory Perception

The auditory pathway is also a very important channel for learning. It involves considerably more than auditory acuity. Auditory perception relates to the ability to distinguish points in tone and sound. This skill is required if the child is to learn phonics readily. Auditory memory is essential for memorization, a frequently utilized step in the early stages of learning.

It is not clear how auditory perception and memory relate to intelligence. A child may have excellent rote memory without necessarily having high grade intelligence. Indeed, the retarded child may utilize rote memory to compensate for the fact that he may be poor in ab-

stract reasoning. There does not seem to be conclusive evidence that children with auditory pathway problems are necessarily "brain damaged" in the usual sense of the term. In contrast to the "usual" child with visual perceptual problems,[17] the child with auditory pathway difficulty may be calm, well-integrated in personality, agile, and well-coordinated. When behavior problems occur, they may be due to the stress of repeated school failure rather than to a psychiatric disorder. This problem often runs in families, and is, in the author's experience, four or five times as common in boys as in girls. It is sometimes given the confusing term "familial dyslexia".

Auditory perceptual problems may not become apparent until the child is in the second or third grade. In the first grade he may acquire most of his reading vocabulary by sight, or by utilization of visual memory. As reading vocabulary becomes larger and the complicated factors of -ed and -ing endings have to be dealt with, the child will show increasing reading difficulty. Since spelling involves utilization of rote memory and phonics, the child with poor auditory memory and poor auditory perception will show his greatest difficulty in this subject.

Auditory memory (immediate auditory recall) can be roughly checked by asking the patient to repeat numbers, words or phrases. He can be asked to write a sentence from dictation; for example, "The little boy threw the ball across the river". If handicapped in this modality, he will misspell simple words and will have to ask for parts of the sentence to be repeated. Although he may show good visual motor performance, with individual letters written correctly, he will have trouble remembering the alphabet, and may have to resort to the "alphabet song" or may have to keep going back to the first. His reading performance shows some characteristic features. He may confuse simple words such as "of" and "for." He will often confuse words with similar meaning, but dissimilar sounds. For example, he may say "dinner" for "supper"; may say "window" for "glass".

Although these children would probably have gone through school as mediocre readers and spellers in previous generations, they will be seriously penalized in their school careers today unless given the benefit of remedial reading programs or other educational aids. This disorder appears more amenable to special educational therapy than most of the other learning disorders.

C. Kinesthetic Sense

Kinesthetic sense is usually understood to include those functions having to do with muscle sense, sense of position, body image and related temporal-spatial concepts. It is postulated that these functions reside in the nondominant cerebral hemisphere. Theoretically, then, one would expect the child with left hemiparesis to have kinesthetic perceptual problems. This association has been noted.[5,18] However, some children with hemiparesis show no evidence of perceptual problems.

Kinesthetic pathway problems may exist in "pure" form, or may be seen in association with one of the other perceptual problems. The child so handicapped may also have difficulty with abstract reasoning. He may or may not show objective evidence of "brain damage".

Neurological examination of children with perceptual problems should include testing of position sense, two-point discrimination, and figure writing on the palm in addition to other sensory tests. The patient should be given problems of two column addition. He will show confusion as to which column to add first. He will therefore have encountered difficulty in arithmetic by the time "carrying" and "borrowing" are introduced. He may have difficulty in reasoning out a simple problem like, "If you had six pieces of candy and gave two to your sister, how many pieces would you have left?" Because of his confusion in direction and time-space concepts, he will usually do poorly in geography. When shown a map of the United States, he may be unsure which side is east, and whether the Pacific Ocean should go on the right or left hand side of the page.

It should be emphasized that the foregoing paragraphs are an over-simplification of the complex subject of perceptual disorders. Perceptual problems are manifested differently in each child and educational therapy will depend upon the nature of the child's problem. The variety of these disorders makes their study more challenging to physician, educator, and psychologist.

Hyperactivity

Hyperactive, distractible behavior can occur in association with a variety of neurological

disturbances of childhood. The child with "brain damage" due to any cause may show this unpleasant symptom. In some children, erratic, distractible behavior may be the only symptom of cerebral dysfunction. However, this disorder may be sufficient to seriously interfere with the child's ability to learn and may result in his being banished from the classroom.

Hyperactivity can be a manifestation of emotional disturbance. However, it is usually of a different type from the hyperactivity of the brain injured child. Careful observation will usually distinguish the two.

History of difficult delivery or other cerebral insult may be obtained in the hyperactive child. He may have been irritable, with poor sleep habits since birth, or he may have first shown the disorder when he began to walk. The mothers complain that these children seem to remain in the "toddler" stage for a prolonged period of time. They do not profit from instruction, are heedless of danger, and are from one activity to another. Fortunately, the hyperactivity tends to clear in the pre-adolescent years. Some children who were previously hyperactive appear completely normal in behavior and activity by the time they reach their teens.

Medication is often quite helpful in enabling the child to adjust to school. The purpose of medication is to slow the child's driving energy so that he can respond to routine and lengthen his attention span. It is undesirable to produce over-sedation, mental sluggishness, or a "drugged" state in the child. The physician should familiarize himself with several drugs which are generally useful for such children, as there is no pat rule as to which child will do well on which drug. Each article in the medical literature suggests a different therapeutic regimen. Some which have been found by the author to be useful are:

a) Dilantin (R)—5-8 mg/kg/day in two or three divided doses. This drug is beneficial to a number of hyperactive children even though there is no history of seizures.
   Although one would expect this drug to be more useful in children with abnormal EEG findings, there does not appear to be a direct correlation.

b) Thorazine (R)—This drug has, in the author's experience, been more useful than any of the other "tranquilizers". This could be because of greater experience with this drug. Ten to 25 mg., two or three times a day is usually adequate for the school child; exact dosage must be tailored to the individual.

3) Dexedrine (R)—This drug is usually either of dramatic effect after only a short trial period, or is aggravating to the child's symptoms. Five to 10 mg. spansules one or two times a day have been tried, though considerably larger doses have been used in some centers.

d) Phenobarbital — Barbiturates are mentioned only to be condemned. If given in a large enough dose to "slow the child down", they usually have sufficient sedative effect to produce physical and mental sluggishness. The latter is particularly undesirable to the school child.
   The barbiturates have a paradoxical effect on many children, being accompanied by irritability, hyperactivity, and emotional lability. These side effects limit their usefulness in the treatment of convulsive disorders, as well as treatment of behavior problems.

A variety of other "tranquilizers" and related drugs have been tried. One major point to remember is to try one drug for an adequate period (about a month unless undesirable side effects are noted) before switching to another. It is well to obtain the teacher's opinion, as well as that of the mother, in deciding whether medication has been helpful. Too often this detail is overlooked. Not only is the teacher's observation helpful, but she will usually appreciate being consulted in this way and will prove a valuable and sympathetic ally in the treatment of the child.

Epilepsy

The subject of treatment of childhood seizure disorders is a complex one and beyond the scope of this paper.[6] Two complications of epilepsy, in the child with normal learning potential, are sometimes detrimental to the mental functioning of the school child.

Uncontrolled epilepsy may be associated with mental torpor. The child may be in a sub-clinical seizure state much of the time. The

doctor should be alert to this possibility any time an epileptic child's teacher reports that he appears dazed or "in another world" at times.

Some physicians, in their zeal to prevent epileptic attacks, lose sight of the overall functioning of the child, and render him stuporous. It is not uncommon to see a child who has been thought to be retarded, only to learn that he is mentally obtunded from the use of excessive amounts of barbiturates and other anticonvulsants. Simple changes in therapeutic regimen can allow the pupil to function normally again.

Dilantin overdosage results in the well-known symptoms of ataxia, nystagmus, and nausea. These symptoms have occasionally led the unwary physician to suspect brain tumor or degenerative disease in the child with Dilantin overdosage. Although this drug is felt by the author to be the single most effective drug in the treatment of childhood epilepsy, and one relatively free from side effects,[7] overdosage is to be deplored. There is evidence to suggest that permanent cerebellar damage may result from prolonged Dilantin overdosage.[16]

Many physicians tend to "give up" on seizure control if the first two or three drugs tried do not produce the desired effects. In addition to diphenylhydantoin and various barbiturates, the succinimides, oxazolidinediones acetazolamide and others may be useful.[6] Side effects should be famliar to the physician so that they can be recognized early.

Motor Impairment

The plight of the child with spastic quadriparesis or overt "cerebral palsy" is obvious to all. There is not a sharp line of demarcation between "cerebral palsy", incoordination and normal motor function. Children who are clumsy, poorly coordinated or "mal-adroit" should not be penalized unduly for their handicap. Hand-writing and physical education endeavors will tend to suffer most.

Much good has doubtlessly come of the interest which educators have shown in the child with minimal brain dysfunction. Their findings have served to remind us all that the brain functions as a unified whole, and that the clumsy child may also be the child with learning problems. However, this conclusion does not necessarily follow.

Physicians realize that there is no invariable correlation between motor and mental functioning. The child with cerebral palsy may have a brilliant mind, with a record of excellent school achievement. The mentally deficient youngster may be unexpectedly agile. The doctor can temper occasional over-enthusiasm of educators who may tend to place undue emphasis on programs stressing physical agility. One child was about to be retained in the first grade because she had not mastered rope jumping! Such illogical extensions of this school of thought do exist. One must have reservations about carryover from improvement in motor functioning to academic performance, while endorsing physical fitness and improved coordination in general.

Emotional Disturbance

It is common practice for children with learning disabilities to be labelled as "emotionally disturbed". Rather, the child who is otherwise normal may become disturbed as the result of his school failure. Careful investigation will usually show that emotional and behavior problems in many of these children were the result of, not the cause of, the poor school progress. One often hears that Rusty is "just lazy", or Johnny is "all boy", or that Sally merely "does not like school". These superficial pronouncements do more harm than good. Closer investigation will usually separate the children with learning disorders from the much rarer group of children who fail to learn because of emotional disorders.

Conclusion

Causes of learning disorders are legion. The one best equipped to come to a scientific understanding of the problem, and to correlate the various disciplines involved in this subject, is the physician. With a modest amount of study and experience in this field, he will soon find that he is "expert" among his colleagues. He is then ready to expand his knowledge in this fascinating area, and to help the total needs of the child.

Summary

One of the most common problems for which a school age child is brought to his physician is that of learning disability. Until recent years, this difficulty was not considered

(Continued on Page 89)

Experience with the Technique of Pituitary Freezing As a Means of Destruction of the Gland†

William W. Winternitz, M.D..* James A. Maddy, M.D..**
Charles B. Wilson, M.D..*** and Horace Norrell, M.D.****

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Experience with cryohypophysectomy is reviewed. Forty-four patients underwent the procedure in the treatment of cancer of the breast and prostate, diabetic retinopathy, and selected functioning and non-functioning pituitary tumors.

OVER the past two years we have acquired considerable experience with the technique of cryohypophysectomy in a number of clinical circumstances. Stereotaxic placement of a freezing probe has provided a relatively safe and usually effective means of destroying the contents of the sella turcica.

Indications For Hypophysectomy

Carcinoma of the Breast

Hypophysectomy in recurrent inoperable carcinoma of the breast has been a recognized form of palliation for many years. In the premenopausal patient, hypophysectomy may be followed by a remission of the tumor, particularly if the patient has had a previous response to oophorectomy. In these circumstances a third to a half of the patients will obtain a second remission following pituitary ablation. Post-menopausal patients are likely to benefit from hypophysectomy if they have previously demonstrated a response to estrogen therapy. Approximately one-third of post-menopausal patients may have regression of tumor after this procedure and the percentage may be greater if they are selected on the basis of previous response to estrogen therapy.[1] Unfortunately there are no adequate methods for predicting the response of the individual patient to this procedure.

Carcinoma of the Prostate

Hypophysectomy has been less extensively tried in cancer of the prostate and there are no extensive series reported. As in the case of breast cancer, our indication for cryohypophysectomy was the development of progressive disease following endocrine therapy (orchiectomy and estrogen administration). We did not limit hypophysectomy to those who had shown a response to previous endocrine manipulation, although these patients are the most likely to benefit from the procedure.

Response to Operation

The effect of the operation in all patients with cancer was judged by subjective and objective response. These include relief of pain, weight gain, improved blood picture, decreased bone metastases, decreased soft tissue masses, diminution of pleural or pericardial effusions, shrinking of the primary tumor, relief of compression symptoms on nerve trunks, spinal cord, gastrointestinal tract, ureters, bladder, etc.

Diabetic Retinopathy

Severe diabetic retinopathy is known to improve following partial or complete destruction of the pituitary gland. Response is sometimes dramatic and in 50 to 75% of selected cases, progress of the lesion can be arrested.[2] Neovascular proliferation and development of new hemorrhages are particularly susceptible to improvement following hypophysectomy. Patients must be carefully selected to avoid unnecessary surgery. Criteria usually set are: presence of progressive retinal disease with some salvageable vision, the absence of overwhelming disease of other organs, and the ability of the patient to cooperate in the course of post-operative management. The availability of a rela-

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tively non-traumatic procedure for pituitary destruction facilitates the treatment of some diabetics who might tolerate craniotomy poorly. Thus the criteria for this procedure may be somewhat relaxed (experimentally at least) because of the greatly reduced difficulty of post-operative control following trans-sphenoidal cryohypophysectomy.

Pituitary Tumors

Selected patients with functioning pituitary tumors with resultant Cushing's disease or acromegaly are candidates for pituitary destruction by freezing or other techniques. In cases of excessive adrenal secretion due to a pituitary disorder, particularly when associated with evidence of an intrasellar tumor, logical therapy is directed to the pituitary gland. If irradiation of the gland fails to control the disorder, the more drastic procedure of hypophysectomy is indicated. Acromegaly has also traditionally been treated by an irradiation of the pituitary gland, but recent studies employing specific growth hormone assays have shown that in many, if not most instances, destruction of the functioning tumor is incomplete and acromegaly continues although in a somewhat less active form.[3] A safe and if possible selective method of pituitary destruction is probably the first treatment of choice in most cases of active acromegaly.

Techinque Of Cryohypophysectomy

This technique was first developed by Rand[4] and has been adequately described in previous publications.[5] Procedure is carried out under local anesthesia with the head held in a stereotaxic frame. Position of the probe is controlled by x-rays in the horizontal and vertical planes. Freezing is carried out at a temperature of —185° C for the desired period of time. Tissue can be removed prior to freezing through a biopsy needle designed for this purpose. Adequate specimens from all tumors have been obtained in this manner. Post-operatively the patient is cautioned against nose blowing and activity is somewhat reduced for a day or so, but is in general unrestricted. Adrenal steroid replacement is started at the time of operation and continued parenterally for 24-48 hours and then by oral administration with decreasing doses to a maintenance level of cortisone 37.5 mgs. daily. A single midline, 15 minute lesion has proved adequate for satisfactory functional ablation of the pituitary gland in most instances. The two most frequent complications of the procedure in our hands have been diabetes insipidus (usually temporary) and cerebrospinal fluid rhinorrhea.

Pre- and Post-Operative Studies

All patients underwent pre- and post-operative tests of endocrine function as well as appropriate clinical studies to evaluate the effects of hypophysectomy. Routine studies were as follows: corticotrophin (ACTH) function by determination of plasma hydrocortisone level (A.M. and P.M.), urinary 17-ketogenic and 17-ketosteroid excretion, and response to metyrapone; thyrotrophin (TSH) function by means of protein-bound iodine (PBI) and the 24 hour I^{131} uptake; gonadotrophins by bioassay of urinary follicle-stimulating hormone (FSH); growth hormone (STH) by immunoassay in the fasting state and in response to insulin-induced hypoglycemia. Glucose tolerance tests were routinely carried out pre- and post-operatively.

Following operation the above function studies were repeated. The patients were withdrawn from steroid support as soon as their post-operative condition became stable, usually in two or three days. Plasma and urinary steroids and clinical status were followed carefully. If adrenal collapse had not ensued in four to five days, metyrapone was administered. If the patient withstood adrenal steroid withdrawal and metyrapone administration without definite clinical adrenal insufficiency, he was judged to be incompletely hypophysectomized, although in some instances urinary and plasma levels of corticosteroids approached zero. The PBI, I^{131} uptake, and FSH levels were followed at intervals of one week, one month, and one to two months thereafter, until the PBI was below 3.5 micrograms percent and the I^{131} uptake persistently below 10%. The FSH was repeated until demonstrated to be persistently zero mouse units. (Table 1)

Results

Forty-four patients underwent hypophysectomy between June, 1965, and June, 1967. The majority (36) had wide-spread carcinoma

TABLE 1

CRITERIA FOR INSUFFICIENCY (I)

ACTH	- I =	Adrenal crisis following steroid withdrawal with metyrapone administration if necessary. Plasma and urinary corticosteroid levels at or near O during this period.
TSH	- I =	I^{131} less 10%, PBI less than 3.5 mcg % or both.
FSH	- I =	O m.u./24 hr.
STH	- I =	2 millimicrograms/ml. or less with failure to rise following hypoglycemic stimulus.

of the breast or prostate. The remainder had pituitary tumors or diabetes mellitus with retinopathy. (Table 2)

TABLE 2

INDICATIONS FOR HYPOPHYSECTOMY
(June, 1965 - March, 1967)

Metastatic Ca Breast	25
Metastatic Ca Prostate	11
Acromegaly	3
Cushing's disease	1
Chromophobe adenoma	2
Diabetes (for retinopathy)	2
Total	44

Results of Function Tests

Thirty-eight patients had normal pituitary glands before operation. Post-operative endocrine function studies in most cases indicated complete functional ablation of the anterior pituitary. (Table 3) ACTH function was judged to be abolished in all but six instances. The first patient was able to withstand steroid withdrawal and metyrapone stimulation despite failure to increase steroid excretion following metyrapone. This patient was carried for one month without steroid supplementation before being placed on substitution therapy. One year later she was withdrawn from substitution therapy and promptly developed clinical adrenal insufficiency. The second and third patients had only a single 10-minute lesion placed and they were likewise incomplete as judged by failure to develop clinical adrenal insufficiency. In the other three instances, incomplete hypophysectomy was related to a malfunction of the probe due to the leak in the system and inadequate lowering of the temperature. Two of these patients have shown decreased ACTH function, but the third (unique in our experience) showed normal ACTH reserve following the operation. TSH function, when it could be adequately evaluated, was judged to be destroyed in all but three cases. In two the I^{131} uptake fell from a normal pre-operative level to less than 10% following the operation but had returned to normal range six weeks following the procedure. The third patient displayed normal I^{131} uptake immediately following the operation. (This is the same patient who also showed no reduction in ACTH reserve.) FSH excretion was persistently 0 mouse units in all except one case in which adequate studies were possible. Growth hormone function, when tested, was abolished by the operation. In summary, functional anterior pituitary destruction was complete insofar as tested except in seven cases. In three, this was related to inadequate freezing time. (10 minutes), and in three it was related to malfunctioning of the probe. (Table 3)

TABLE 3

FUNCTION TESTS
Normal Pituitary (Pts. with Cancer or Diabetes)

	ACTH	TSH	FSH
Insufficient	27/31	28/31	27/28

TABLE 4

FUNCTION TESTS - ABNORMAL PITUITARY

		ACTH	TSH	FSH	STH
Acromegaly (1)	Pre-op	N	N	N	100 mug/ml.
	Post-op	incompl.	N*	O	2 mug/ml.
Acromegaly (2)	Pre-op	incompl.	incompl.	O	50 mug/ml.
	Post-op	I	I	O	50 mug/ml.
Acromegaly (3)	Pre-op	N	..	N	
	Post-op	N	..	incompl.	
Cushing's	Pre-op	N	N	N	..
	Post-op	N*	N*	O	..
Chromophobe (1)	Pre-op	incompl.	I	I	
	Post-op	I	I	I	
Chromophobe (2)	Pre-op	I	I	I	
	Post-op	not tested post-op			

*Improved during year after operation.
I = Insufficient
N = Normal

Six patients with pituitary tumors underwent cryo-surgery. Three of these patients, one with acromegaly and two with chromophobe adenomas, had pre-operative loss of anterior pituitary function in all parameters studied. Post-operatively, function was further reduced in those instances in which it was not already completely absent. In three patients with adequate pituitary function pre-operatively some normal function was retained post-operatively despite destruction of functioning tumor. (Table 4)

TABLE 5

SUMMARY
RESULTS OF HYPOPHYSECTOMY—PATIENTS WITH CANCER

	No.	Survived More than 2 Weeks	Adequate Follow-up	Remissions	Duration
Breast Ca	25	23	21	7	1-18 mos.
Prostate Ca	11	10	9	7	2-12 mos.
Total	36	33	30	14	1-18 mos.

Clinical Results of Hypophysectomy

Nineteen patients with breast cancer have been followed long enough to determine the response of their tumors to hypophysectomy. Six patients obtained a clinical remission. Remissions have varied in duration from one month to 20 months. In one instance remission was obtained in a patient who had not previously responded to endocrine manipulations. Among 11 patients with prostatic cancer, who survived more than two weeks post-operatively, no benefit was observed in one instance. In the remaining cases, seven showed definite remission of the disease as judged by relief of pain or regression of the tumor, and the remaining three have had questionable remissions or have not been followed long enough to determine their response of the tumor. (Table 5)

Eight patients without cancer underwent hypophysectomy. (Table 6) Remissions were obtained in three of the four with functioning pituitary tumors. Of two patients with severe diabetic retinopathy, one improved. Two patients with chromophobe adenomas have had no signs of recurrence during a follow-up period of eight months. (Table 6)

Complications

Four patients died less than one month following surgery. In two instances cause of death was the continued rapid advancement of the tumor. In the other two cases, both with severe, wide-spread carcinoma, death within several days seemed to be directly related to the operative procedure. Both of these patients were poor operative risks due to chronic pulmonary disease and endstage carcinomatosis.

Disregarding mild polyuria persisting less than 48 hours, 18 patients developed diabetes insipidus. Persistent diabetes insipidus requiring replacement therapy beyond two months has occurred in seven patients. Nine patients developed cerebrospinal rhinorrhea. In four, rhinorrhea was transient and in four persistent rhinorrhea was treated successfully by packing the sphenoid sinus. In one instance packing of the sphenoid sinus was carried out under general anesthesia, following which a cavernous sinus snydrome involving one eye developed. This resolved in four months. (Table 7)

TABLE 6

RESULTS OF HYPOPHYSECTOMY
IN NON-CANCER PTS.

Patient	Remission or improvement	Duration
Acromegaly (1)	Yes	18 mo.
Acromegaly (2)	No	
Acromegaly (3)	Yes	3 mo.
Cushing's (1)	Yes	20 mo.
Diabetic retinopathy (1)	No	
Diabetic retinopathy (2)	Yes	5 mo.
Chromophobe Adenoma (1)	Yes	8 mo.
Chromophobe Adenoma (2)	Yes	8 mo.

TABLE 7

COMPLICATIONS

Deaths (within 2 weeks)	3
Diabestes Insipidus (persistent)	7
Rhinorrhea, (requiring packing)	6
(ophthalmoplegia)	(1)
Visual field defect	2

Antibiotics were administered only to patients with rhinorrhea and not routinely used. Patients commonly complained of headache for 24-72 hours after operation and cerebrospinal fluid removed by lumbar puncture often contained a few red blood cells and white cells at this time. No patient has developed bacterial meningitis.

No serious complications occurred during the course of surgery. Several patients experienced transient loss of vision in one or both eyes secondary to cooling of the optic nerves or chiasm. One patient developed a persistent altitudinal visual field defect in the left eye. Vomiting was frequent following the operation but has not occurred while the patient was in the stereotaxic frame. Post-operative bleeding has not been a significant problem and nasal packing has not been required. Extraocular muscle palsies were only observed in the case in which injury occurred during the course of packing the sphenoid sinus.

Discussion

In this series of patients with metastatic carcinoma, our results tend to confirm the ob-

servation that the patients who have previously responded to endocrine manipulation will be more apt to enjoy a remission following hypophysectomy. In only one of the patients with breast cancer who appeared to be refractory to previous hormonal therapy was remission observed following pituitary ablation. All the patients with prostatic cancer had had endocrine therapy with some response. There was, however, no clear correlation between the length of the previous response and the length of the remission following hypophysectomy.

Our experience in patients with carcinoma of the breast is consistent with previous studies of the effect of hypophysectomy in this disease.[1] Approximately one-third of the patients (who were unselected as to previous endocrine response) showed a favorable response to the procedure. In our series of patients with prostatic cancer the results are better than any previously reported. Of 10 patients who survived the operation by more than two weeks, only one has clearly failed to improve. A second case has shown some subjective improvement although local advancement of the disease has been noted. Of the remaining eight patients, seven have shown definite, although sometimes transient responses, and the remaining patient has not been followed long enough to be certain, but he may have been benefited by the procedure. This experience with prostatic cancer, although still relatively small, indicates that much wider application of this form of therapy should be explored.

Two patients with diabetic retinopathy tolerated the operation very well. The first patient's vision failed to improve, and this was attributed to the excessively far-advanced retinal disease. The second patient has shown some improvement of vision over the post-operative period of five months. In addition, several other patients with carcinoma had frank diabetes mellitus or abnormal glucose tolerance curves. In each instance there has been an improvement of diabetes, as might be expected, with reduction of insulin requirements by about 50%. Abnormal glucose tolerance curves have returned to normal in some instances. In none of these patients was the control of diabetes difficult during the operative or post-operative period.

Our favorable experience also recommends cryo-surgery for selected pituitary tumors. This approach is contraindicated if the tumor compresses the optic pathways or third ventricle because of the danger of transmitting the destructive cold front from the tumor into the adjacent structures. We froze one large ACTH-secreting chromophobe adenoma for 30 minutes and three smaller eosinophilic adenomas for 20 minutes. Functioning tumor was destroyed in three patients without complete destruction of normal pituitary tissue adjacent to the tumor. These three patients have had excellent remissions of their disease. Although these tumors may become active later, our limited experience suggests the possibility of selectively destroying tumor cells yet preserving some of the normal pituitary remnant. The fourth patient had acromegaly with hypopituitarism, and following the operation he has continued to require replacement therapy. The tumor was not completely destroyed as determined by late post-operative return of elevated levels of growth hormone. Both patients with non-functioning chromophobe adenomas have done well without recurrence of their tumor for a period of eight months.

Diabetes insipidus persisting more than four months complicated seven of 44 therapeutic hypophysectomies. All patients so far studied with diabetes insipidus had clinically complete hypophysectomy. Previous workers [4,6,7] have reported diabetes insipidus in 30-50% of the patients with complete hypophysectomy carried out by cryo-surgery. A certain proportion of patients undergoing this procedure will probably develop diabetes insipidus regardless of technique employed. This is presumably due to extension cold front into the pituitary stalk.

Cerebrospinal rhinorrhea required treatment in five patients. This complication has been less common in recent months. This improvement is attributed to exercising care not to perforate the dura during the destruction of the normal gland. If rhinorrhea persists beyond one month it is treated by packing of the sphenoid sinus.

Comparison with Other Methods

Stereotaxic cryohypophysectomy entails considerably less surgical morbidity than does craniotomy and open hypophysectomy and appears to be equally efficacious in pituitary ablation. Trans-sphenoidal surgical removal of the

normal pituitary gland is difficult and hazardous. Implantation of radioactive materials by the trans-sphenoidal route has presented three major difficulties: first, uncertainty of clinically complete hypophysectomy at radiation levels free of complications; second, damage to the optic nerve and to cranial nerves supplying extraocular muscles; and, third, early and late occurrence of cerebrospinal rhinorrhea and pituitary abscess.[10,11,12,13] Although more an inconvenience than a threat to life, persistent diabetes insipidus has been the one common complication of cryohypophysectomy in our experience.

Summary

We have briefly reviewed our experience with stereotaxic cryohypophysectomy in the treatment of 44 patients with cancer of the breast and prostate, diabetic retinopathy, and selected functioning and non-functioning pituitary tumors. The procedure is one of low morbidity which can be tolerated with relatively little discomfort by even severely debilitated patients. Operative mortality is low and is attributed more to the extremely poor general physical state of the patient than to the procedure. The two most frequent complications of the operation are diabetes insipidus which is persistent in one-fifth or less of the patients, and cerebrospinal rhinorrhea which has been a significant problem in a smaller number of the cases. The results obtained thus far indicate that this is a safe and efficacious method of treating these conditions.

References

1. Kennedy, B. J., and French, L. Hypophysectomy in Advanced Breast Cancer. *Am. J. Surg.*, 110:411-415, 1965.
2. Speakman, J. S., Mortimer, C. B., Briant, T., Ezrin, C., Lougheed, W., Clarke, W. Pituitary Ablation for Diabetic Retinopathy. *Canad. Med. Assn. J.*, 94:627-635, 1966.
3. Beck, P., Schalch, D. S., Parker, M. L., Kipnis, D. M., Daughaday, W. H., Correlative Studies of Growth Horomone Insulin Plasma Concentrations with Metabolic Abnormalities in Acromegaly. *J. Lab & Clin. Med.*, 66:366-379, 1965.
4. Rand, R. W., Dashe, A. M., Paglia, D. E., Conway, L. W., and Solomon, D. E., Stereotaxic Cryohypophysectomy. *J.A.M.A.*, 189:255-259, 1964.
5. Wilson, C. B., Winternitz, W. W., Bertan, V., and Sizemore, G. Stereotaxic Cryosurgery of the Pituitary Gland in Carcinoma of the Breast and Other Disorders. *J.A.M.A.* 198: 587-590, 1966.
6. Conway, L. W., and Collins, W. F. Cryohypophysectomy. Technique, Evaluation and Results in Twenty Cases. *Paper presented to the American Academy of Neurological Surgery*, October 14, 1965, Cincinnati.
7. Bleasel, K., and Lazarus, L. Cryogenic Hypophysectomy. *Med. J. Australia*, 2:148-150, 1965.
8. Bateman, G. H. Trans-sphenoidal Hypophysectomy—A Review of 70 Cases Treated in the Past Two Years. *Tr. Am. Acad. Ophth. Otol.*, 66:103-110, 1962.
9. Morse, A. E. The Transpalatosphenoidal Approach to the Hypophysis. *South. Med. J.*, 58:1483-1486, 1965.
10. Harper, P. V., Standjord, N., Paloyan, E., Moseley, R. D., Warner, N. W. and Lathrop, K. A. Destruction of the Hypophysis with a Sr^{90}-Y^{90} Needle. *Ann. Surg.*, 160:743-751, 1964.
11. Hartog, M., Doyle, R., Fraser, R., and Joplin, G. F. Partial Pituitary Ablation with Implants of Gold-198 and Yttrium-90 for Acromegaly. *Brit. Med. J.*, 2:396-398, 1965.
12. Kelly, W. A., Evans, J.P., Marper, P. V. Hymphreys, E. M. The Effect Upon the Hypophysis of Radioactive Yttrium. *Surg., Gynec., & Obst.*, 106:600-604, 1958.
13. Udvarheylyi, G. B., and Dickson, R. J. Trans-sphenoidal Radiation Hypophysectomy with Gold-198. *J.A.M.A.* 181:84—87, 1962.

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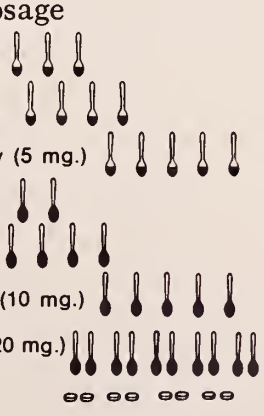
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ide Effects: Side effects are relatively uncommon but among those reported are astrointestinal irritation, sedation, dizziess, cutaneous manifestations, restessness, insomnia, numbness of the xtremities, headache, blurring of vision, welling of the gums, euphoria, depression nd general malaise.

Dosage: The recommended initial daily dosages, given in divided doses until diarrhea is controlled, are:

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8-12 yr. . .1 tsp. 5 times daily (10 mg.)
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ow well does Vistaril relieve the symptoms that ague an alcoholic during the recovery period? octors Knott and Beard of the Alcoholic Rehalitation Unit, Tennessee Psychiatric Hospital id Institute, recently conducted a double-blind udy comparing Vistaril and another well-tablished antianxiety agent with placebo in 60 ronic alcoholic patients.[1]

ne investigators conclude: "It was the opinion the staff that hydroxyzine was generally more fective than chlordiazepoxide, for the follow-g reasons: hydroxyzine was equally if not more fective in reducing anxiety and tension and it oduced less daytime sedation...."[1] (See results succeeding pages.)

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ith Vistaril, it is as easy to op therapy as it is to start.

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HYDROXYZINE PAMOATE)

the study:[1] Sixty chronic alcoholic patients were hospitalized and randomly assigned to one of three oral double-blind treatment regimens for three weeks. Twenty patients received hydroxyzine (Vistaril®), 100 mg. q.i.d.; twenty others were given chlordiazepoxide, 25 mg. q.i.d.; and the remaining twenty received placebo capsules q.i.d. The capsule code was not made known until after completion of the study and analysis of the data. Response was measured with a modification of the Brief Psychiatric Rating Scale as originally outlined by Overall and Gorham.* Subjects were rated daily by trained staff members.

SYMPTOM RATING KEY

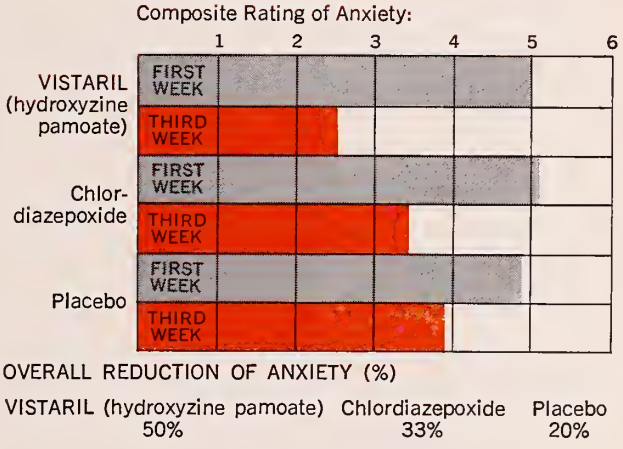
1=Not Present	4=Moderately Severe
2=Mild	5=Severe
3=Moderate	6=Extremely Severe

The figures which are given below represent the composite conclusions of the staff based on daily ratings during initial and final weeks of the study.

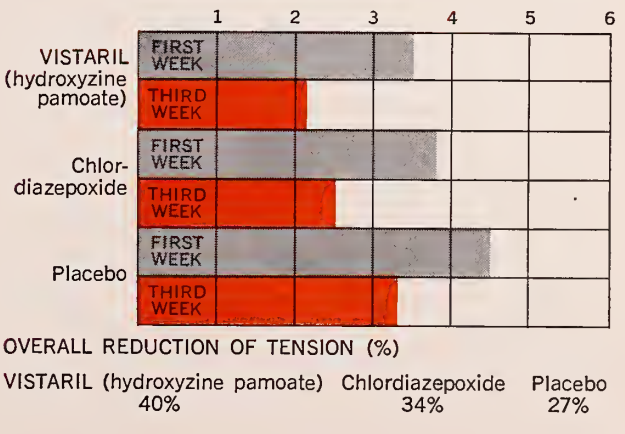
*Psychological Reports 10:799, 1962

the results[1] DURING FIRST WEEK DURING THIRD WEEK

Anxiety reduced with Vistaril



Tension eased with Vistaril



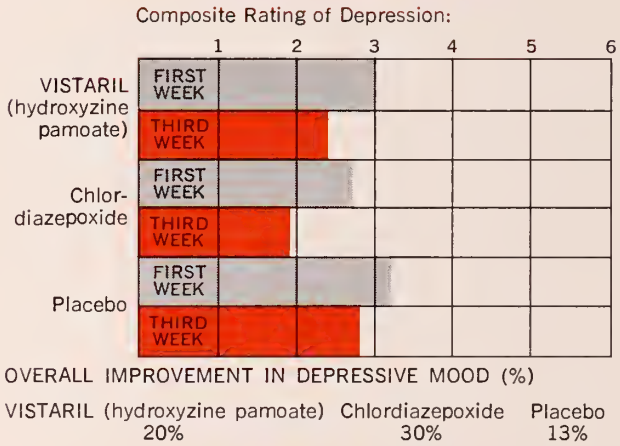
EASE SEE LAST PAGE FOR PRESCRIBING INFORMATION

In Alcoholism...

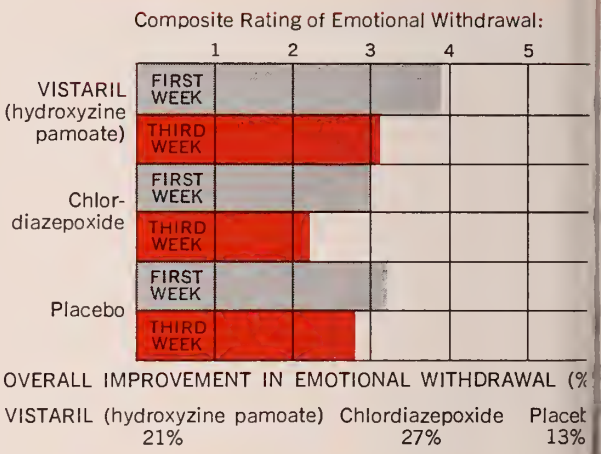
"Both hydroxyzine and chlordiazepoxide were generally more effective than the placebo. In some aspects, hydroxyzine was superior to chlordiazepoxide, which is currently the most frequently used psychotropic drug in the management of alcoholism."[1]

DURING FIRST WEEK DURING THIRD WEEK

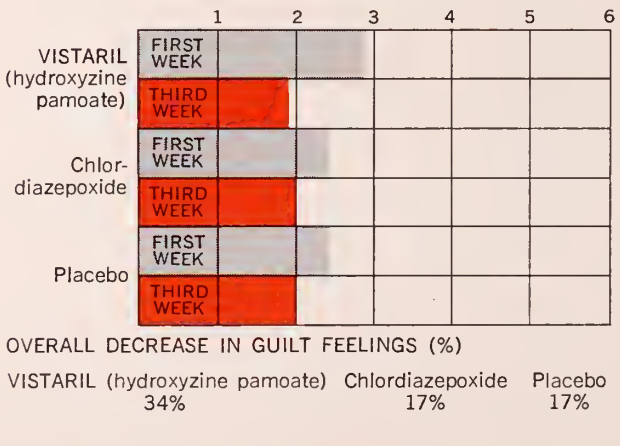
Depressive mood improved with chlordiazepoxide



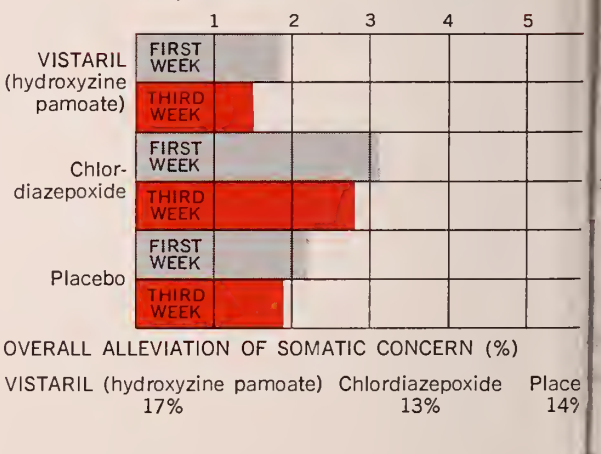
Emotional withdrawal counteracted with chlordiazepoxide



Guilt feelings allayed with Vistaril



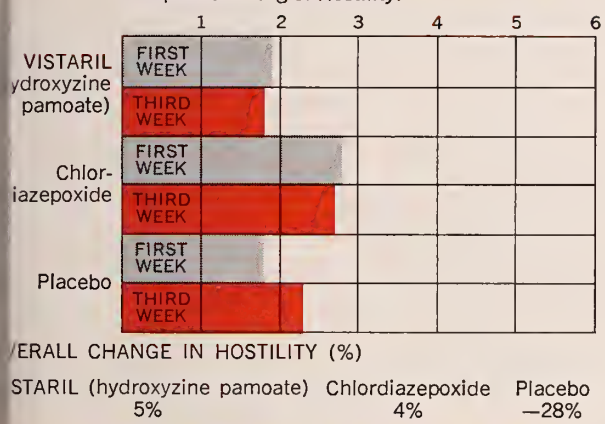
Somatic concern alleviated to minor degree in each group



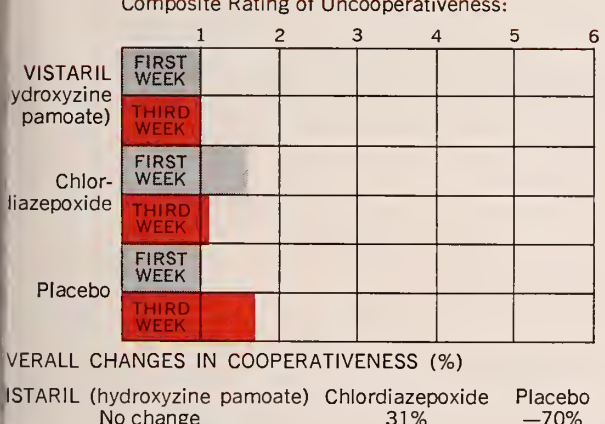
Less drowsiness with Vistaril

	Drowsiness	Dizziness	Mouth Dryness	Increased Motor Activity	Ataxia	Nausea	Comments
VISTARIL (hydroxyzine pamoate)	6 patients (mild)	3 patients (mild)	2 patients (moderate)	—	—	—	Side Effects Not Treated
Chlor-diazepoxide	10 patients (severe in 6)	4 patients (mild)	—	1 patient (moderately severe in first week but gradually subsided)	—	—	Side Effects Not Treated
Placebo	2 patients (mild)	2 patients (mild)	—	—	1 patient (mild)	2 patients (mild)	Side Effects Not Treated

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ooperativeness not a significant problem



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BRIEF SUMMARY

Contraindications: Hypersensitivity to hydroxyzine. The parenteral solution, for intramuscular or intravenous use, *must not* be injected subcutaneously or intra-arterially.

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Precautions: Hydroxyzine may potentiate the action of central nervous system depressants such as narcotics and barbiturates. In conjunctive use, dosage for these drugs should be decreased, as much as 50%. Because drowsiness may occur, patients should be cautioned against driving a car or operating dangerous machinery. The usual precautions for intramuscular injection should be followed; soft-tissue reactions have rarely been reported when proper technique has been used. Hydroxyzine parenteral solution for intramuscular use should be injected well within the body of a relatively large muscle. In adults, the preferred sites are the upper outer quadrant of the buttock (i.e., gluteus maximus), or the mid-lateral thigh. In children, preferably the mid-lateral muscle of the thigh. In infants and small children the upper outer quadrant of the gluteal region should only be used when necessary, as in burn patients, in order to minimize the possibility of damage to the sciatic nerve. The deltoid area should be used only if well developed, such as in certain adults and older children, and only with caution to avoid radial nerve injury. Injections should not be made in the lower and middle thirds of the upper arm. Aspiration should be done to help avoid intravascular injection. On reported intravenous injection a few instances of digital gangrene have occurred distal to the injection site, considered to be due to inadvertent intra-arterial injection or possibly periarterial extravasation. Therefore, particular caution (aspiration and site injection) should be observed to insure injection only into intact veins; avoid either intra-arterial injection or extravasation. Intravenous administration should be accomplished slowly, no faster than 25 mg. per minute, and not to exceed 100 mg. in any single dose. In order to avoid possible adverse effects it is recommended that hydroxyzine parenteral solution be diluted to at least 50 cc. with sterile normal saline and administered over a period of four minutes or more, preferably into the tubing of a running intravenous infusion.

Adverse Reactions: Drowsiness may occur; if so, it is usually transitory and may disappear in a few days of continued therapy or upon dosage reduction. Dryness of the mouth may occur with higher doses. Involuntary motor activity, including rare instances of tremor and convulsions, has been reported, usually with higher than recommended dosage.

When this product is given intravenously undiluted, minimal amounts of intravascular hemolysis occur at the site of injection. Giving the maximum recommended intravenous dose (100 mg.) to adults results in immediate transient hemolysis with the liberation of a total of 2-3 grams of hemoglobin, which, in some individuals, can cause small amounts of hemoglobinuria. This compares with the normal red cell destruction from which approximately 8 Gm. of hemoglobin are liberated every 24 hours. If the hydroxyzine is diluted with 50 cc. of normal saline and given during a period of four minutes or more, this phenomenon does not occur.

Supply: Vistaril (hydroxyzine pamoate) Capsules: Equivalent to 25 mg., 50 mg., 100 mg. hydroxyzine HCl. Vistaril (hydroxyzine pamoate) Oral Suspension: Equivalent to 25 mg. hydroxyzine HCl per 5 cc. teaspoonful. Vistaril (hydroxyzine HCl) Parenteral Solution: 25 mg./cc.—10 cc. vial and 50 mg./cc.—2 cc. and 10 cc. vial; Isoject,® 25 and 50 mg. per cc., 1 cc. per unit.

More detailed professional information available on request.

Reference: 1. Knott, D.H. and Beard, J.D.: GP 36:118, September, 1967.

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References: 1. Shumon, C.: Am. J. Med. Sci., 225:54, 1953. 2. Perchuk, E., et al.: Angiology, 12:102, 1961. 3. Rowls, W., et al.: Med. Times, 87:818, 1959.

6/67 Q-706A

Primary Idiopathic Segmental Infarction of the Greater Omentum in Children†

James W. Mullen, M.D.,* and Ward O. Griffen, Jr., M.D., Ph.D.**
Lexington, Kentucky

Primary omental infarction is a disease which simulates appendicitis. Prolonged symptoms without marked abdominal signs should alert one's suspicion. At laparotomy serosanguineous fluid and a normal appendix are the usual findings. Recovery is complete.

THE surgical solution of the acute abdomen commonly resides in a few disorders, e.g. appendicitis, cholecystitis, perforated ulcer and bowel obstruction. Appendicitis is by far the most common preoperative diagnosis in a child with abdominal pain requiring surgery. Two recent cases of primary idiopathic segmental infarction of the greater omentum in children stimulated this review.

Case Reports

M. W. UKMC #06-70-92 The patient, a 3 year old white girl, was admitted to the UKMC on September 29, 1966. She was in good health until morning two days prior to admission at which time she noted anorexia and right-sided abdominal pain. The pain subsided during the afternoon but recurred in the evening and remained constant until admission. She had not had a similar episode. Physical examination showed normal vital signs; there was slight erythema of the right anterior tonsillar pillar. She had guarding and tenderness in the entire right abdomen—more so in the right lower quadrant. No masses could be felt and no rebound elicited. She had a positive psoas sign. There was pain on the right on rectal examination. The white cell count was 16,100 with 60% neutrophils, and the rine contained a few white cells. Exploratory laparotomy was undertaken because of presumptive diagnosis of acute appendicitis. The peritoneal fluid which was serosanguineous eventually grew Klebsiella aerobacter. However, she was found to have a normal appendix, mesenteric lymphadenitis, and a 5 x 3 x 2 cm. segment of omentum which was darkened and indurated and histologically showed acute and chronic inflammation and multiple thromboses. Her postoperative course was uneventful and she was discharged on October 3, 1966.

N. T. UKMC #06-81-15 This 8 year old white girl was admitted for the first time to UKMC on October 16, 1966. She gave a history of one week of insidious and intermittent right lower quadrant abdominal pain. At first it was thought to be due to a muscle strain and was treated with local heat. However, the pain intensified and 24 hours prior to admission it became persistent and was associated with vomiting and anorexia. There were no constipation, fever or chills. She had never had a similar episode. On physical examination her vital signs were normal except for an oral temperature of 99.4°. She seemed to be in acute distress with her thighs flexed on the abdomen. There was voluntary guarding in the right lower quadrant with point tenderness. No masses could be palpated. Rectal examination was negative. Laboratory work-up showed a white cell count of 12,000 with 66% neutrophils, urinalysis showed a 15-20 polymorphonuclear cells. Abdominal films were negative. Preoperative diagnosis of acute appendicitis was made although segmental omental infarction was mentioned as a possibility. At operation, however, the appendix was normal. She did have a 5 x 3 x 1 cm. segment of omentum which was covered by a fibrinous exudate. This portion of the omentum was removed along with the appendix. Her postoperative course was complicated by some persistent fever and an inflamed wound which when opened failed to grow out any pathogens. Cul-

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ture of the peritoneal fluid was sterile. Histologic examination of the omental segment demonstrated severe non-specific inflammatory reaction with thrombosis of all vessels. She was discharged on November 1, 1966 and has remained in good health since.

Incidence

The absolute incidence of this entity probably has not increased although it is being recognized and reported more frequently. Classically a disease of middle-aged men, it, nevertheless, occurs as frequently in children according to a recent review by Perry[1]. The two cases described here make a total of 42 children who have been reported to have the lesion. (Table I)

Criteria For Diagnosis

Primary segmental infarction of the omentum should be distinguished from omental infarction associated with other disease, e. g. known abdominal trauma, hernia, etc.

Wrizeresenski et al[2] proposed the following criteria for the diagnosis:

1.) The infarction of the greater omentum must be idiopathic, of no obvious etiologic factor, and spontaneous.

2.) The infarction must be primary in the omentum and not accompanied by tension, trauma, etc., or secondary to some other pathology.

3.) The infarction must be segmental, involving only a limited segment of the greater omentum and not involving large areas of the omentum.

4.) The infarction must present a typical gross and microscopic picture of the disease.

Etiologic Theories

Many explanations of the cause of primary segmental infarction have been proposed. Some authors have proposed a distinction between torsion of the omentum and infarction, but in the reported cases the difference is overlooked. However, in this review cases of torsion of the entire omentum and those of cysts of the omentum occurring after gradual torsion have been eliminated. Schottenfeld and Rubenstein[3] are proponents of subjectively insignificant minor blunt abdominal trauma as a cause of the lesion. If this were the case, one would expect children, who have a greater incidence of such minor injuries, to have this disease more often than adults. This is not true.

Obesity has been a consistent clinical finding regardless of the age of the patient. Harris et al[4] have theorized that the weight of the heavy fatty omentum might stretch the thin-walled veins sufficiently to cause rupture and subsequent thrombosis. The tendency of the disease to localize on the right side, particularly at the RLQ, has led to a theory of an anatomical peculiarity of the vasculature of that por-

TABLE I

SEGMENTAL OMENTAL INFARCTION—CHILDREN

Author	Year	Age	Sex	Symptoms Duration (Days)	Vomiting	Tenderness	WBC x10^3	Pre-Op. Diagnosis Acute	Peritoneal Fluid	Infarction Size (CM)
Erdmann[11]	1921	14	M	Not recorded	Yes	RLQ	—	Appendicitis	Not Mentioned	Not recorded
Coen[12]	1928	7	M	Not recorded	No	RLQ	—	Appendicitis	Turbid	8 x 4
D'Errico[13]	1930	7	F	3	No	RLQ	16.2	Appendicitis	Turbid	6x1.5x2.5
Strauss[14]	1930	15	F	3	No	RLQ	12.0	Appendicitis	Serosanguineous	Not recorded
Barsky[15]	1936	5	F	1	Yes with acute phase	RLQ	14.4	Appendicitis	Serous	Not recorded
Schottenfeld[3]	1949	7	M	6	No	RUQ	13.0	Appendicitis	None described	Not recorded
Ramsey[17]	1941	9	F	1	No	RLQ	13.7	Appendicitis	Bloody	7.5 (diameter)
Puderbach[18]	1945	8	F	1	No	RLQ	17.9	Appendicitis	Bloody	egg-sized

(Continued on Next Page)

(Table 1 Continued)

Author	Year	Age	Sex	Symptoms Duration (Days)	Vomiting	Tenderness	WBC x10^3	Pre-Op. Diagnosis Acute	Peritoneal Fluid	Infarction Size (CM)
MacLean[19]	1950	6	F	1	Yes	RLQ	—	Appendicitis	Clear	7 x 5
	1950	4	F	5	Yes	RLQ	—	Appendicitis	Not mentioned	3 x 1.5
	1950	4	F	1	Yes	RLQ	—	Appendicitis	Not mentioned	4 x 4
Manfriedi[20]	1950	9	F	1	No	RLQ	13.8	Appendicitis	Clear	2 x 3
Catanzaro[21]	1952	4	F	1	No	RLQ	11.35	Appendicitis	None described	9 x 4
	1952	10	M	4	Yes	RLQ	11.9	Appendicitis	None described	5.5 x 3.5
Hallstrand[22]	1954	3	F	4	Yes	RLQ	11.2	Appendicitis	Sero-sanguineous	large
	1954	11	M	1	No	Peri-umbilical	11.55	Appendicitis	Sero-sanguineous	Not recorded
Miller[23]	1954	6	F	2	Yes	RLQ	23.5	Appendicitis	Not mentioned	15 (length)
Mitchener[24]	1954	5	F	1	No	RLQ	17.6	Appendicitis	Sero-sanguineous	1 x 5 x 3
Davis[25]	1954	6	M	14	No	RLQ	17.0	Appendicitis	Sero-sanguineous	Not recorded
	1954	3	F	0.5	No	RLQ	18.0	Appendicitis	Sero-sanguineous	Not recorded
Cooper[26]	1955	5½	F	5	No	RLQ	—	Appendicitis	Sero-sanguineous	Not recorded
Cavanagh[27]	1955	5	F	1	No	RLQ	14.5	Appendicitis	Sero-sanguineous	8 x 4 x 2.5
Shea[28]	1955	13	M	2	No	RLQ	10.0	Appendicitis	Amber	2.5 diam.
Farrugia-Bonnici[30]	1957	6	F	1	Yes	RLQ	12.0	Appendicitis	None	9 x 7
	1957	11	M	3	No	RLQ	14.4	Appendicitis	None	5.5 x 9
	1957	8	F	2	No	RLQ	15.4	Appendicitis	None	4 x 3.5
Hinshaw[29]	1956	9	M	1	No	RLQ	12.0	Appendicitis	Sero-sanguineous	4 x 6
Till[31]	1957	9	M	2	Yes	RLQ	16.2	Appendicitis	Not mentioned	3 x 4
	1957	8	F	2	Yes	RUQ	18.5	Mass ? etiology	Serosanguineous	3 x 7
Neeley[32]	1958	10	M	3	No	RUQ	8.4	Infectious hepatitis	Sero-sanguineous	8.5x4x3.5
	1958	11	F	4	No	RLQ	8.2	Ovarian cyst	Not mentioned	8 x 4 x 2
	1958	8	M	3	No	RLQ	12.4	Appendicitis	Sero-sanguineous	6 x 5
Blansfield[33]	1959	6	F	2	Yes	RLQ	8.8	Appendicitis	Sero-sanguineous	6 x 7 x 4
Dugas[34]	1959	9	M	1	Yes	RLQ	10.6	Appendicitis	None described	3x1.5x1.2
Knudson[35]	1962	9	M	1	No	RLQ	14.1	Appendicitis	None described	Not recorded
Perry[1]	1963	9	F	4	No	RUQ	13.5	Appendicitis	Sero-sanguineous	3 x 2 x 1.5
Fahlund[36]	1965	10	M	3	No	RLQ	10.0	Mesenteric adenitis	None described	2 x 4
Takita[37]	1965	7	M	Not recorded	Yes	R-mid-abdomen	14.0	Appendicitis	None described	Not recorded
Tompkins[38]	1966	14	?	1	?	RLQ	13.8	Appendicitis	None described	Not recorded
Mullen	1966	3	F	2	No	RLQ	16.1	Appendicitis	Sero-sanguineous	5 x 3 x 2
Mullen	1966	8	F	7	Yes	RLQ	12.0	Omental infarction (tongue-in-cheek)	Sero-sanguineous	5 x 3 x 1

tion of the omentum. Since the right free margin of the omentum is the most dependent aspect, the differential effect of gravity might predispose this area to greater congestion and thrombosis.

Totten[5] explained the pathogenesis of epiploic infarction on the basis of its blood supply from the right and left gastroepiploic system. He was impressed by the fact that the symptoms often began following a heavy meal and reasoned that the full stomach compressed the gastroepiploic venous return and led to thrombosis of the omental veins.

Experimentally, Nario[6] attempted to reproduce the stasis and congestion of acute omental blood flow disruption. By ligation of the left and right epiploic veins in animals he observed the development of multiple, miliary hemorrhagic infarcts in the omentum. No segmental infarctions were seen. Pines and Rabinovitch[7] showed that sudden stretching of jugular veins in rabbits caused thrombosis and felt that this proved that same sequence could occur in the omental veins.

More recently the pathogenesis has been explained on the basis of allergic factors by Sosa-Gallardo et al[8]. In experimental work they have been able to demonstrate localized segmental infarction of the omentum as a manifestation of the Arthus and Schwartzman phenomena. This theory may have merit in view of the long-purported antibody production capabilities of the omentum.

Clinical Features

In children the sex distribution is equal. The patient gradually develops a moderately severe, steady, diffuse mid-abdominal pain that becomes localized to an abdominal quadrant (usually RLQ) within 24 to 48 hours. Anorexia is common; nausea infrequent; and vomiting rare although more usual in children.

The patient has a mildly elevated temperature. On abdominal examination the tenderness in the right lower quadrant is often slightly higher than McBurney's point and is not as well localized as with appendicitis. Rebound tenderness may be present and a mass palpable. The patient often exhibits exquisite cutaneous hyperesthesia over the area of most tenderness. The bowel sounds are normal or slightly depressed. Usually rectal examination and the psoas and obturator signs are unrewarding.

The white blood cell count may be normal or elevated; urinalysis is within normal limits. Abdominal X-rays are usually not helpful, although Ribet[9] has noted that segmental epiploic infarction may produce a patch of grayish radio-density in the area of greatest tenderness.

The preoperative misdiagnosis of segmental omental infarction varies with the localization of the clinical findings. Since the signs are most frequently found in the RLQ, acute appendicitis is the most frequent preoperative diagnosis. Right upper quadrant localization of the complaints usually leads to a diagnosis of acute cholecystitis, or, on occasion, a perforated peptic ulcer. Left lower quadrant signs lead to a diagnosis of diverticulitis, or in females a diagnosis of an ovarian lesion. In our second case a diagnosis of primary segmental infarction of the omentum was made facetiously because of the prior exposure. This same sequence has been reported before[10].

Operative Management

At laparotomy, the first characteristic finding is serosanguineous fluid in the peritoneal cavity. As much as 150 ml. of this fluid has been recovered. Exploration of the abdominal organs shows no gross abnormalities except for the localized area of infarction of the omentum. The involved segment is usually well-demarcated, wedged shape, thickened and at the free margin. Occasionally the omental area is attached to the peritoneal wall. Grossly varying degrees of hemorrhagic and gangrenous changes are present. Microscopic examination shows venous congestion, thrombosis of the arteries, hemorrhage, fat necrosis and inflammatory changes.

The treatment of choice is excision of the infarcted area. Uually the appendix, which is normal, is removed. All patients have had an unremarkable postoperative course, and no recurrences have been reported.

Summary

Despite divergent etiologic views, the therapy of primary idiopathic segmental infarction

of the greater omentum is clearly surgical. This diagnosis will be made preoperatively only with a high index of suspicion, but it should be suspected when the duration and severity of complaints do not corroborate the abdominal findings. At laparotomy the appearance of serosanguineous fluid associated with a normal appendix should make the surgeon suspicious of the diagnosis and encourage him to look carefully at the omentum for a segmental infarction. Recurrence is not seen and recovery is uneventful.

Bibliography

1. Perry, J. F. Jr., Primary segmental infarction of the omentum in children. *Surgery 56:* 584, 1964.
2. Wrizeresenski, J. T., Firestone, S. D., and Walske, B. R., Primary idiopathic segmental infarction of the omentum. 2 cases. *Surgery, 39:* 663, 1956.
3. Schottenfeld, L. E. and Rubinstein, H., Hemorrhage and thrombosis of the omentum. *Am. J. Surg., 51:* 449, 1941.
4. Harris, F. I., Diller, T., and Marcus, S. A. Hemorrhagic infarction of the greater omentum simulating acute appendicitis. 2 cases. *Surgery, 23:* 206, 1948.
5. Totten, H. P. Primary idiopathic segmental infarction of the greater omentum. *Am. J. Surg., 56:* 676, 1942.
6. Nario, C. V., Bases vascularis para el estudio de la pathologia del gram epiplon. *Semana med 2:* 1234, 1934.
7. Pines, B. and Rabinovitch, J. Idiopathic segmental infarction of the greater omentum. *Surg. Gynec. & Obstet., 71:* 80, 1940.
8. Sosa-Gallardo, C. A., Ferraris, A. and Kesner, L., Pathogenesis of idiopathic infarction of the greater omentum. *Lyon. chir., 57,* 570, 1961
9. Ribet, M., Epiploic infarctus of occlusive form; radiological images. *Lille chir. 12:* 26, 1957.
10. Halligan, E. J. and Rabiah, F. A. Primary idiopathic segmental infarction of the omentum. Report of 4 cases and review of literature. *Arch. Surg., 79,* 738, 1959.
11. Erdmann, J., Torsion of Omentum, *Ann. Surg. 73:* 252, 1921.
12. Coen, V., Sur un caso di torione acuta del grande omentum, *Policlinico* (Surg. Sect.), *35:* 252, 1928.
13. D'Errico, W., Primary torsion of great omentum, *New Eng. J. Med., 203:* 1181, 1930.
14. Strauss, L., Zur frage der metztorsion, Beitr. *Klin. Chir. 148:* 36, 1930.
15. Barsky, E. K. and Schwartz, A.M., Primary omental torsion, *Am. J. Surg., 38:* 356, 1937.
16. Hederstad, G C., Intra-Abdominal omental torsion, *Ann. Surg. 109:* 57, 1939.
17. Ramsey, J. G., Torsion of omentum: Report of two cases, *Virginia Med. Month, 72:* 388, 1945.
18. Puderbach, W. J., Torsoin of omentum, *New York J. Med. 49:* 1571, 1949.
19. MacLean, A. B., Primary torsion of omentum in children, *Brit. Med. J. 1:* 100, 1950.
20. Manfriedi, D. H., Omental segmental infarction in infancy, *Arch. Ped., 67,* 247, 1950.
21. Catanzaro, R. P. and Farley, J. E. Jr., Omental segmental infarction. A report of 2 cases in children, *J. Pediat. 40:* 240, 1952.
22. Hallstrand, D. E., Primary omental infarction, *Am. J. Surg. 87:* 563, 1954.
23. Miller, D. B. and Belford, R. J., Primary torsion of omentum, *J. Med. Soc. New Jersey, 51:* 23, 1954.
24. Mitchener, J. S., Omental infarction. Report of 2nd case in childhood. *Surgery, 36:* 1148, 1954.
25. Davis, H. C., Mangels, M. and Bolton, A. A., Primary torsion of omentum in children. *J.A.M.A., 155:* 744, 1954.
26. Cooper, N. C., Torsion of omentum, *Lancet 268:* 130, 1955.
27. Cavanagh, M. J. and Campanale, R. P., Idiopathic omental torsion simulating appendicitis, *Arch. Surg. 70:* 564, 1955.
28. Shea, E. J., Pomer, E. A., Spillman, J. W., Idiopathic segmental infarction of the greater omentum. Report of 6 cases and review of literature. *New Eng. J. Med. 254:* 263, 1956.
29. Hinshaw, D. B. and Stafford, C. E. Idiopathic segmental infarction of the omentum. Case report in a child. *Calif. Med. 85:* 339, 1956.
30. Farrugia-Bonnici, P. and Marsden, H. B., Primary torsion of omentum in childhood. *Brit. Med. J. 2:* 448, 1957.
31. Till, H. J. and Cameron, J. M., Torsion of omentum and appendices epiploicae causing acute abdominal pain. *J. Med. Assoc. Alabama 27:* 133, 1957.
32. Neely, J. C., and Holzer, E. H., Primary torsion of omentum in children. *Ann. Sur. 148,* 995, 1958.
33. Blansfield, H. N. and Jameson, P. C., Spontaneous idiopathic segmental infarction of the omentum. *Conn. Med. 23:* 697, 1959.
34. Dugas, J. E., Burke, E. L. and Omo, L., Primary idiopathic segmental infarction of the omentum. Collected review and report of a case. *Am. J. Gastroenterol. 319,* 382, 1959.
35. Knudson, R. J. Primary idiopathic segmental infarction of the greater omentum. *Am. Prac. and Digest. Treat. 13:* 191, 1962.
36. Fahlund, G. T. and Smedley, N. P. Primary torsion of the greater omentum. Report of four cases. *Amer. Surg. 31:* 285, 1965.
37. Takita, H., Idiopathic segmental infarction of the greater omentum. *Canad. Med. Assoc. J. 93:* 223, 1965.
38. Tompkins, R. K. and Sparks, F. C., Primary torsion of the omentum-mimic of appendicitis: Review of 6 cases. *Amer. Surg. 32:* 399, 1966.

SPECIAL ARTICLES

Inactivated Measles Vaccine: Discontinuance of Use

WALTER T. HUGHES, M.D.*

PUBLIC health authorities see a distinct possibility of the end of measles (rubeola) as an epidemic disease. The reality of this goal is already becoming apparent in the United States. The marked decrease in morbidity and mortality from measles, evident in 1965 and 1966, resulted from intensive immunization programs with measles vaccines. Two general types of vaccines have been used: the inactivated, killed and the live, attenuated measles vaccines. The latter type has been used much more extensively than the killed vaccines.

It is presently strongly recommended that all infants receive the live, attentuated measles vaccine at about one year of age. Recently, California has become the latest of six states to pass laws making measles vaccination compulsory for all children.

Because immunity derived from the killed vaccines was of relatively short duration, children who received these vaccines in the early immunization programs have subsequently been given the live, attenuated vaccine.

Within the past year certain unusual local and systemic reactions have been observed when recipients of inactivated vaccine later encountered natural measles or received the live attenuated measles virus vaccine. These reactions have been of two general types:

1. *After exposure to natural measles*: illness has followed characterized by an atypical rash beginning on the feet and extending superiorly, concentrating on the lower extremities. The lesions have been petechial, vesicular and urticarial. Pneumonitis, high fever and edema have also occurred.
2. *After administration of live vaccine*: a reaction at the injection site occurs with erythema, tenderness and swelling. A localized vesicular or hemorrhagic lesion accompanied by fever, malaise and regional lymphadenopathy has also been described.

This "Arthus-like" phenomenon was observed in 16 (4%) of 400 children in Switzerland who were vaccinated with live measles vaccine one month after a prevaccination with inactivated measles vaccine. The adverse reactions appeared six to eight days after the administration of the live measles vaccine and consisted of a local swelling at the injection site and a mild maculopapular rash. In four (1%) of these children fever was present. Antibody studies and clinical observations suggest an antigen antibody reaction of the Arthus type. None of these reactions seemed to be related to allergy to the culture media of the vaccines.

Krugman, Giles and Friedman found that 11 of 66 children at risk developed the atypical illness when exposed to natural measles four years after the administration of the inactivated vaccine. Katz, in Boston, reported that nine of 31 children had local reactions when given live vaccine one year after the inactivated antigen.

It should be emphasized that these reactions have not been reported with the live, attenuated measles virus vaccine unless prior administration of the killed vaccine has occurred.

In no instance has the reaction been fatal or led to any serious sequelae.

On November 15, 1967, the Committee on Control of Infectious Diseases of the American Academy of Pediatrics made the following recommendations:

1. "Inactivated measles vaccine be deleted from all schedules of immunization.
2. Live, attenuated virus vaccine be given as soon as possible to all children who may have received only inactivated vaccine previously and that their parents be cautioned of possible local and systemic reactions which may occur.
3. Children with underlying illnesses or receiving forms of therapy which contraindicate the use of live vaccines be given immune globulin (human) for protection on exposure to measles. Special attention should be directed to the prompt immunization of the siblings and close contacts of such children with live attenuated vaccine in order to reduce their opportunity for contact with natural disease."

These recommendations are sound and safe. We also strongly urge the continued administration of the live attenuated measles virus vaccine to susceptible children in the manner described by the American Academy of Pediatrics and the U. S. Public Health Service.

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EDITORIALS

One Step Further

PEOPLE come to physicians usually for one of three reasons: they present some specific complaint. or complaints. which they wish investigated; they desire a general physical and laboratory examination to discover any unsuspected abnormality; or they come for a periodic or annual examination because they have been taught that is a good health measure. The common denominator, especially of the second and third groups, is generally a secret or expressed fear of cancer. Almost everyone is now cancer conscious. There is an earnest desire for some one simple overall test that would define clearly whether or not one is the victim of cancerous disease. Unfortunately none is available.

The success of the cytological examination of cervical smears has been the greatest stimulus of all in causing women to come for periodic examination at which time among other things the breasts are carefully inspected and palpated. The prostate is almost as vulnerable an organ as the cervix, but it has been far more difficult to impress upon men the necessity for its frequent palpation for evidences of malignancy. The long effort at educating people to the urgency for early detection of cancer has however been largely successful. The most vulnerable sites are generally known and periodic health examinations are becoming more and more the accepted pattern.

Interest in measures for prevention of cancer has now become a chief medical concern. The long investigation for the cause for increasing malignant diseases of the lung has borne more positive return than that directed to other systems. The use of tobacco in its various forms—chiefly cigarettes and snuff —is almost certainly a cancerogenic agent. The constant breathing of irritating substances as certain fumes or gases or dusts has long been suspect and perhaps with good reason. The patient who has had a malignant lesion demonstrated in one breast is far more likely to have the same type of lesion in the other breast than are women in general. So important is this that removal of both breasts is now more frequently advised than ever before.

The prolonged and excessive use of alcohol in many persons produces irreparable damage to the liver and biliary tree, and it appears that this may be an important factor in the increase found in pancreatic malignancy.

Many large centers for the early detection and treatment of cancer have learned much in recent years of predisposing factors and have made wide investigation in the detection of precancerous disease. The Strang Clinic in New York this year has undertaken to establish and operate a Preventive Medicine Institute. For the formal opening of this Center, Ronald W. Raven. F.R.C.S., Senior Surgeon, Royal Marsden Hospital and Institute of Cancer Research, Royal Cancer Hospital, London, gave an address on "The Prospects of Cancer Prevention." He presented little of positive or tried means of detecting precancerous states but suggested a number of avenues which may be worth exploring.

Our knowledge of the carcinogenicity of estrogens and the prolonged use of oral hormonal contraceptives is not yet conclusive. Additives to foods deserve the most careful scrutiny. The prolonged use of some of the newer drugs deserves study in this regard. Smoking is associated with cancer involving the laryngx, pharynx and esophagus, and higher rates of cancer of the urinary bladder have been found among smokers. Many workers in medical and other fields are subjected to ionizing radiation in one form or another, and the radioactive fallout from the explosion of nuclear devices provides carcinogenic potentiality of entirely unknown extent. Familial polyposis and ulcerative colitis of long duration have long been recognized as carrying high potentials for cancer. Asymptomatic adenomas and ploys of the colon probably precede the development of malignant disease; for this reason routine sigmoidoscopy in well persons over 30 years of age at yearly intervals is reasonable. Osteitis Deformans or Pagets Disease of the bone is a non-malignant disease, but may progress to malignancy, usually osteogenic sarcoma, as long as 35 years after its early recognition.

Of prevention Mr. Raven says:

> We are moving forward into a new phase of the fight to control cancer, where prevention will provide a most powerful weapon which we are just starting to use. Its potential value is enormous, future prospects

are bright. Cytodiagnosis is still in its infancy but its value is already proved; this technique for studying cellular variations from the normal, through pre-malignancy to cancer is capable of application to many organs and tissues. We must develop computer techniques to screen whole populations and learn more about the changes in cells that precede the state of invasive cancer. Then methods will evolve for reversing those changes to normality again. Cancer diagnosis should be advanced into the subclinical stage of cancer development. In addition to cytological techniques including electron microscopy, cytophotometry, thermography and ultra-sonic methods should be used. The detection of human carcinogens and the mechanism of carcinogenesis are fundamental problems to solve in addition to discovering the enzymic pathways which are essential for converting normal to malignant tissue. Such problems are of great complexity but should not be insoluble with all the available resources of modern biochemistry.

We must confess that our vision or imagination is less graphic or far reaching, but he has something there.

SAM A. OVERSTREET, M.D.

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Devised as a research tool in psychosomatic medicine, this interesting method records respiratory excursions, galvanic skin resistance, cardiac activity and finger pulse volume as physical responses to stress. These autonomic nervous system responses to a standardized stressor—a film dealing with life-threatening incidents—are continuously monitored on the polygraph.

This gives a graphic representation of changes which the body may undergo in reacting to stress. The application of modern statistical analysis to these graphs provides a yardstick by which the calming effect of Valium (diazepam) can be measured quantitatively.

Before prescribing, please consult complete product information, a summary of which follows:

Contraindications: Infants, patients with a history of convulsive disorders, glaucoma or known hypersensitivity to drug.

Warning: Not of value in the treatment of psychotic patients, and should not be employed in lieu of appropriate treatment.

Precautions: Limit dosage to smallest effective amount in elderly or debilitated patients (not more than 1 mg, one or two times daily initially) to preclude ataxia or oversedation, increasing gradually as needed or tolerated. As is true of all CNS-acting drugs, until correct maintenance dosage is established, advise patients against possibly hazardous procedures requiring complete mental alertness or physical coordination. Driving during therapy not recommended. In general, concurrent use with other psychotropic agents is not recommended. If such combination therapy is used, carefully consider individual pharmacologic effects—particularly with known compounds which may potentiate action of Valium (diazepam), such as phenothiazines, barbiturates, MAO inhibitors and other antidepressants. Advise patients against simultaneous ingestion of alcohol or other CNS depressants. Safe use in pregnancy not established. Employ usual precautions in treatment of anxiety states with evidence of impending depression; suicidal tendencies may be present and protective measures necessary. Observe usual precautions in impaired renal or hepatic function. Periodic blood counts and liver function tests advisable in long-term use. Cease therapy gradually.

Side Effects: Side effects (usually dose-related) are fatigue, drowsiness and ataxia. Also reported: mild nausea, dizziness, blurred vision, diplopia, headache, incontinence, slurred speech, tremor and skin rash; paradoxical reactions (excitement, depression, stimulation, sleep disturbances, acute hyperexcited states, hallucinations); changes in EEG patterns during and after drug treatment. Abrupt cessation after prolonged overdosage may produce withdrawal symptoms (convulsions, tremor, abdominal and muscle cramps, vomiting, sweating) similar to those seen with barbiturates, meprobamate and chlordiazepoxide HCl.

Dosage—*Adults:* Mild to moderate psychoneurotic reactions, 2 to 5 mg b.i.d. or t.i.d.; severe psychoneurotic reactions, 5 to 10 mg t.i.d. or q.i.d.; alcoholism, 10 mg t.i.d. or q.i.d. in first 24 hours, then 5 mg t.i.d. or q.i.d. as needed; muscle spasm with cerebral palsy or athetosis, 2 to 10 mg t.i.d. or q.i.d. *Geriatric patients:* 1 or 2 mg/day initially, increase gradually as needed and tolerated. (See *Precautions.*)

Supplied: Valium® (diazepam) Tablets, 2 mg, 5 mg and 10 mg; bottles of 50 and 500.

Roche Laboratories, Division of Hoffmann-La Roche Inc.
Nutley, N.J. 07110

References: 1. Selesnick, S. T., and Clemens, T. L.: From research film "Motion Picture Films in Psychosomatic Research," available from Roche Laboratories. 2. Clemens, T. L., and Selesnick, S. T.: *Dis. Nerv. System, 28*:98, 1967.

VALIUM® (diazepam) Roche®

useful for somatic symptoms of psychic tension

Adoption of Statement of Purpose, Changes in Bylaws Among Actions Taken by AMA House of Delegates at 21st Clinical Convention*

This detailed summary of the actions taken by the AMA House of Delegates during the 21st Clinical Convention in Houston November 26-29 is being printed by the editors who feel that it is of special significance to you. Although the summary covers many of the important subjects considered by the House, it is not intended to be a complete report of all actions taken.

A STATEMENT of purposes and responsibilities, Bylaw changes, direct billing under Title XIX and medical education were among the many subjects acted upon by the AMA House of Delegates during the 21st Annual Clinical Convention November 26-29 in Houston.

Speaking at the opening session of the House on Sunday, Milford O. Rouse, M.D., AMA president, stressed the need for "positive leadership" and "visible action" by the medical profession and all other members of the health team.

As citizens, Doctor Rouse said, "we have this choice when facing a situation that needs correcting: we can do it ourselves; or we can ask the government to pass a law" and set up an administrative mechanism to enforce it. "If we should fail to recognize the present as an opportunity for positive action . . . I believe we would fail not only ourselves, but the people of this country, more and more of whom need and want more and more of the services we are uniquely able to render."

The House, of which 238 of 242 delegates were present at the final two sessions, dealt with 96 items of business. Of 57 resolutions from state medical societies or individual physicians, the House adopted 43, amended and adopted 22, referred 21, absorbed four into other adopted items and rejected six.

Distinguished Service Award

Owen H. Wangensteen, M.D., director of the department of surgery at University Hospitals, Minneapolis, was named the winner of the 1968 Distinguished Service Award.

The award will be presented to Doctor Wangensteen at the Annual Convention in San Francisco in June, 1968.

Under a change in the Bylaws, this is the first time the award winner has been selected at the Clinical Convention. Previously he was selected and the award was made at the Annual Convention.

AMA-ERF Institute for Biomedical Research

In a special report on the AMA Education and Research Foundation, Charles L. Hudson, M.D., immediate past president of the AMA and president of the AMA-ERF, reported to the House that the Board of Directors of the AMA-ERF had "voted to endorse in principle the relocation of the Institute for Biomedical Research on, or contiguous to, the University of Chicago campus, and authorized the executive vice president, with appropriate other members of staff and the president and secretary-treasurer of the Foundation to negotiate a contract with the University of Chicago for consideration by the Board of Directors of the AMA-ERF."

The House approved the action of the Board of Directors of the AMA-ERF and endorsed "in principle" the relocation of the Institute "on or contiguous to the University of Chicago."

At the same time, the House requested the Board of the AMA-ERF "to present at each Clinical Convention a report on the projected budget of the Institute for Biomedical Research for the ensuing year and the amount of the projected contribution from the American Medical Association to the Institute during that period."

Medical Education

Several actions were taken relating to medical education.

One was adoption of the Board of Trustees' summary of the Report of the Commission on Research. Fifteen recommendations were contained in the Commission report, two of which were seen as particularly significant.

Recommendation 12 encouraged research in the delivery of health care, "provided it is conducted under proper auspices and in accordance with sound research design and methodology." The House adopted it, with the understanding that such support "should not be interpreted to imply any criticism of the present studies of the delivery of health care." Present efforts are productive, but the medical profession "should not hesitate to make known its interest in continued studies to improve the methods and quality of health care delivery."

Recommendation 13 was addressed to correcting the imbalance between biomedical research and education caused by the "heavy but desirable federal support of research." It stated that "there should be allotted a greatly increased amount for operational expenses of medical schools, to be matched by those schools through private or local governmental sources."

Again the House concurred, stressing the fact that its approval of the recommendation changes the policy of the AMA with respect to federal support for medical education. The change results in "an honest recognition that federal financial support is now accepted by the American medical schools." However, in adopting the recommendation, the House "emphatically urges that a matching formula be used" to "encourage medical schools to retain their independence."

**Report of F. J. L. Blasingame, M.D., executive vice president, American Medical Association*

The House also adopted a resolution that the AMA, through its Council on Medical Education, "utilize all appropriate influences to restore teaching to its proper place of prominence in medical education" instead of giving the lion's share of attention, honors and contributions to research scientists; and adopted 12 guidelines for medical staffs in hospitals with intern and resident training programs.

Health Manpower

A report was adopted on the "Report of the National Advisory Commission on Health Manpower," which was submitted to President Johnson on November 20.

The report was necessarily brief, since there had not been time to study and evaluate the Commission report in any depth, but it pointed out that the Commission's approach to health care problems indicated recognition of the need for orderly procedures rather than harmful "crash" programs. The emphasis in most of the Commission report is to center responsibility on the professional groups best able to evaluate and plan in health areas, rather than on government and non-professionals.

The House adopted the preliminary report; voted to enlarge the AMA Committee on Health Manpower by four members to permit more careful and complete study in this area; and noted that copies of the complete Commission report will be sent to all delegates and alternates, requesting them to submit their comments to their constituent associations as soon as possible.

In addition, the House approved replacing the present AMA Commission to Coordinate the Relationships of Medicine With Allied Health Professions and Services with a new council of the Board of Trustees to be known as the Council on Allied Health Professions; and directed the Association to seek the establishment of a medically oriented federal Commission on Health Resources and Medical Manpower to assure properly balanced distribution of health personnel among government agencies, the armed forces and the civilian population.

Also with respect to health personnel, both professional and allied, the House asked that a report be made at the next meeting evaluating the foreign resident, intern and physician program; requested a study of the present professional liability implications in the use of allied medical personnel; and urged physicians to become acquainted with the programs of the American Association of Medical Assistants and to encourage their assistants to participate in its educational and certification programs.

Health Care

The House adopted a number of reports and resolutions relating to health care from the standpoint of the community and the individual patient.

One emphasizes that standards of medical care are set at the local level and calls attention to disturbing trends pointing to the possible establishment of medical care standards on a national basis.

Another commits the AMA to leadership in informing the public, the profession and other elements of the health care field as to practical means of moderating health care costs, the value of voluntary health insurance, expanding the medical manpower supply and improving the health care of the American people.

With respect to comprehensive planning of health facilities and services, the House urged state and local medical societies to emphasize a variety of activities to be undertaken in the area of over-all planning for governmental and private programs of health care, including "Continued effort by the medical profession to improve federal legislation in this area and to emphasize the importance of local control."

The House reaffirmed that the procurement, processing, distribution or use of human blood and other human tissue is a medical service and is not the selling of a commodity. The Board of Trustees and the state associations were urged to support legislative action at federal and state levels to implement this concept.

The use of monitoring, defibrillation and resuscitative equipment by registered nurses in cases of cardiac emergencies was supported, with provisions regarding the nurse's training and the procedures established by the hospital medical staff.

Alcoholism was identified as a complex disease and the House recognized that the medical components of this entity are medicine's responsibility.

Medicare and Medicaid

In regard to medicare, the House reaffirmed its support for direct billing under the federal program and adopted a resolution regarding the collection and public dissemination of figures on the administrative costs of medicare.

The House resolved that the AMA continue its efforts to provide for the implementation of Title XIX in a manner which recognizes "the physician's right to bill directly all patients, including Title XIX patients, and allows the physician or his patient to be reimbursed his usual, customary and reasonable fee for his professional services;" and that the Association actively seek changes in the law that will secure "equal and simultaneous application to all jurisdictions."

Other Legislative Matters

A resolution urging continuing opposition to S-2299, the Long drug bill, and a report detailing the current status of HR-12080, the Social Security Amendments of 1967, were adopted.

The House also adopted recommendations that the AMA arrange a meeting of state medical association representatives to plan regional conferences of physicians to discuss matters of special interest to state legislators; and that state associations invite key lawmakers to attend AMA conferences.

Also approved was a resolution that state associations establish active legislative task forces at the

(Continued on Page 72)

in moderate hypertension and poorly controlled mild hypertension

(when diuretics or sedatives are inadequate, for example)



When your patients expect a lot...

like relief from hypertensive symptoms
(headache, fatigue, nervousness, palpitation or insomnia, for example)

like an up-to-date, once-a-day dosage schedule
(a schedule not unlike timed-release medication, for example)

like a daily dose of medication for peanuts
(at 10¢ a tablet, for example)

like generally well-tolerated therapy
(as described in the package insert, for example)

...give them a little
(one tablet daily)

Regroton®

chlorthalidone 50 mg., reserpine 0.25 mg.

Indications: Hypertension. **Contraindications:** History of mental depression, hypersensitivity, and most cases of severe renal or hepatic diseases. **Warning:** With the administration of enteric-coated potassium supplements, which should be used only when adequate dietary supplementation is not practical, the possibility of small-bowel lesions (obstruction, hemorrhage, and perforation) should be kept in mind. Surgery for these lesions has frequently been required and deaths have occurred. Discontinue coated potassium-containing formulations immediately if abdominal pain, distention, nausea, vomiting, or gastrointestinal bleeding occur. Discontinue one week before electroshock therapy, and if depression or peptic ulcer occurs. *Use in pregnancy:* Regroton should be used in pregnant patients or in women of childbearing potential only when, in the judgment of a physician, its use is deemed essential to the welfare of the patients; adverse reactions (thrombocytopenia, hyperbilirubinemia, altered carbohydrate metabolism, etc.) are potential problems in the newborn.
Precautions: Antihypertensive therapy with Regroton should always be initiated cautiously in postsympathectomy patients and in patients receiving ganglionic blocking agents, other potent antihypertensive drugs, or curare. Reduce dosage of concomitant antihypertensive agents by at least one-half. To avoid hypotension during surgery, discontinue Regroton therapy two weeks prior to elective surgical procedures. In emergency surgery, use, if needed, anticholinergic or adrenergic drugs or other supportive measures as indicated. Because of the possibility of progression of renal damage, periodic kidney function tests are indicated. Discontinue if the BUN rises or liver dysfunction is aggravated. Hepatic coma may be precipitated. Electrolyte imbalance, sodium and/or potassium depletion may occur. If potassium depletion should occur during therapy, Regroton should be discontinued and potassium supplements given, provided the patient does not have marked oliguria. Take particular care in cirrhosis or severe ischemic heart disease and in patients receiving corticosteroids, ACTH, or digitalis. Salt restriction is not recommended. Use cautiously in patients with ulcerative colitis or gallstones (biliary colic may be precipitated). Bronchial asthma may occur in susceptible patients. **Adverse Reactions:** The drug is generally well tolerated. The most frequent side effects are nausea, gastric irritation, vomiting, diarrhea, constipation, muscle cramps, headache, dizziness and acute gout. Other potential side effects include angina pectoris, anxiety, depression, bradycardia and ectopic cardiac rhythms (especially when used with digitalis), drowsiness, dull sensorium, hyperglycemia and glycosuria, hyperuricemia, lassitude, restlessness, transient myopia, impotence or dysuria, orthostatic hypotension which may be potentiated when chlorthalidone is combined with alcohol, barbiturates or narcotics, leukopenia, aplastic anemia, skin rashes, thrombocytopenia, agranulocytosis, nasal stuffiness, increased gastric secretions, nightmare, purpura, urticaria, ecchymosis, weakness, uveitis, optic atrophy and glaucoma, and pruritus. Eruptions and/or flushing of the skin, a reversible paralysis agitans-like syndrome, blurred vision, conjunctival injection, increased susceptibility to colds, dyspnea, weight gain, decreased libido, dryness of the mouth, deafness, anorexia, and pancreatitis when epigastric pain or unexplained G.I. symptoms develop after prolonged administration. Jaundice, xanthopsia, paresthesia, photosensitization and necrotizing angiitis are possible. **Average Dosage:** One tablet daily with breakfast. **Availability:** Pink, single-scored tablets in bottles of 100 and 1000. (B) 46-600-B
For details, see complete Prescribing Information.

Geigy Pharmaceuticals, Division of
Geigy Chemical Corporation, Ardsley, N.Y.

Geigy

(Continued from Page 69)

congressional district level to maintain an effective working relationship with congressmen.

Support for AMPAC was reaffirmed in a resolution that requested the Board of Trustees to seek additional ways of helping AMPAC enlarge its activities and its assistance to state medical political action committees.

Hospitals

Because both medicare and medicaid provide payment for medical care rendered to patients by residents, the House resolved that the Association should study the problem and develop guidelines that are acceptable to supervising physicians, teaching institutions and government agencies involved in the payment process.

In addition, with respect to hospitals, the House adopted resolutions:

— Proposing the acceptance of physicians on hospital Boards of Trustees as the most effective form of liaison between the medical staff and hospital governing authorities.

— Protecting hospital privileges through "due process."

— Calling for more effective liaison and better coordination between medical staffs and local medical societies.

— Pointing out the need for simplifying attendance requirements for maintaining membership on hospital medical staffs.

— Pressing for prompt revision of the JCAH ruling on the use of externs in non-university affiliated hospitals, with the incorporation of adequate safeguards to insure the quality of programs of extern education.

In addition, model articles of incorporation for hospital medical staffs were made available for distribution in response to requests.

AMA Organization and Procedures

A number of changes were made in the Bylaws;

— Chapter XIV, Section 3(D) was updated, providing that four trustees will be elected annually, each for a three-year term and each limited to three terms.

— The terms in office of the president, president-elect and vice president all will begin and end at the close of the final session of the House of Delegates at the Annual Convention.

— Resolutions must be introduced to the House by a voting delegate.

— Nominations for Affiliate Membership in the AMA in classes (3), (4), (5) and (6) must be approved by the appropriate county and state medical society.

— A general officer's position is to be considered vacant if he misses six consecutive regular meetings of the Board.

— The House approved giving the vice president voting rights on the Board.

Convention Sites

Sites and dates for future conventions will be:

	Annual
1968	San Francisco, June 16-20
1969	New York, July 13-17
1970	Chicago, June 21-25
1971	Atlantic City, June 20-24
1972	San Francisco, June 18-22
1973	New York, July 15-19
1974	Chicago, June 16-20
	Clinical
1968	Miami Beach, December 1-4
1969	Denver, Nov. 30-Dec. 3
1970	Boston, Nov. 29-Dec. 2
1971	New Orleans, Nov. 28-Dec. 1
1972	Atlanta, November 26-29
1973	Anaheim, Cal., November 25-28
1974	Portland, Ore., December 1-4

AMA Objectives

The House adopted a statement of 11 purposes and responsibilities for the AMA, designed to define more clearly the over-all purpose as written in the Constitution: "To promote the science and art of medicine and the betterment of public health."

The entire statement follows:

THE PURPOSES AND RESPONSIBILITIES OF THE AMERICAN MEDICAL ASSOCIATION

It is the responsibility of the American Medical Association, as the representative of the American medical profession, to continue to foster the advancement of medical science and the health of the American people.

Its continuing purposes are to meet this responsibility through the following means:

1. By encouraging the further development of medical knowledge, skills, techniques and drugs; and by maintaining the highest standards of practice and health care.

2. By creating incentives to attract increasing numbers of capable people into medicine and the other health-care professions.

3. By advancing and expanding the education of physicians and other groups in the health-care field.

4. By motivating skilled physicians who have the art of teaching to apply themselves to developing new generations of excellent practitioners.

5. By fostering programs that will encourage medical and health personnel to serve voluntarily in the areas of need for medical care.

6. By developing techniques and practices that will moderate the costs of good medical and health care.

7. By seeking out and fostering means of making all health-care facilities — physicians' offices, hospitals, laboratories, clinics and others — as efficient and economical as good medical practice and attention to human values will permit.

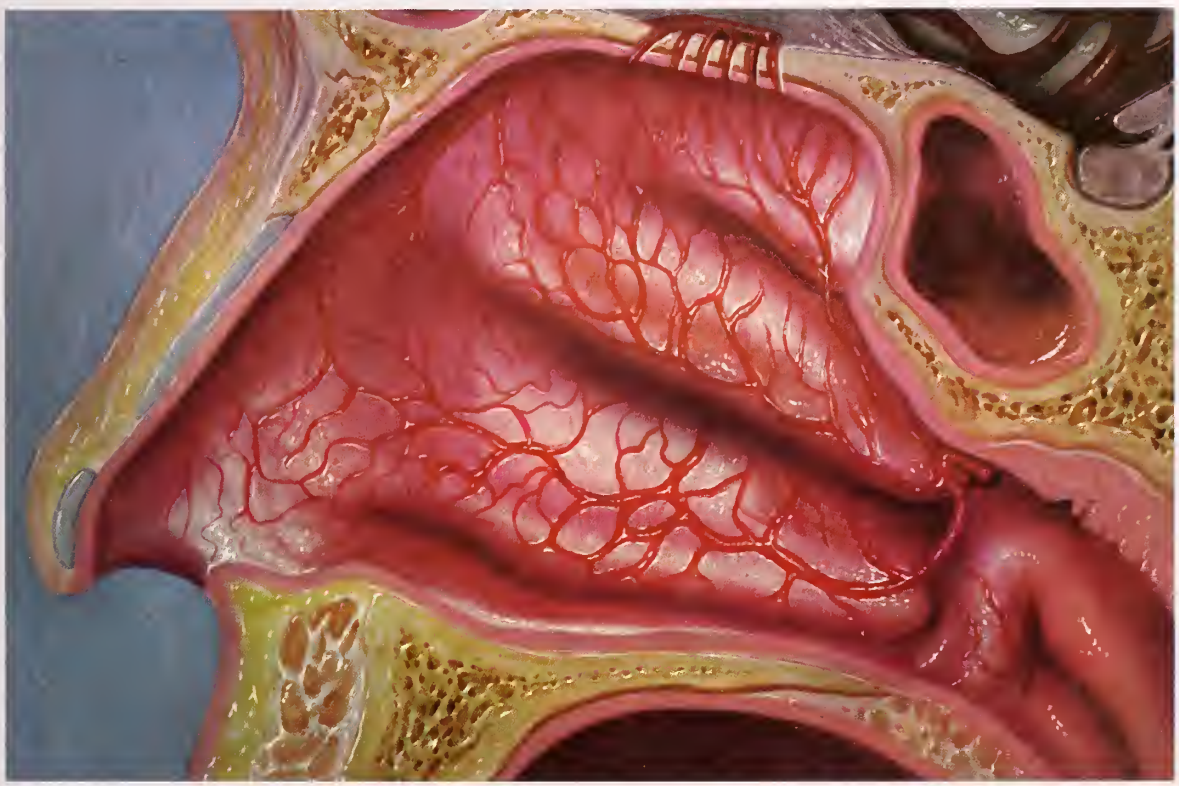
8. By combining the utilization of the latest knowledge for prevention and treatment with the vital healing force of the physician's personal knowledge of and devotion to his patient.

(Continued on Page 102)

winter 1968

DORSEY Season

A journal within a journal published quarterly in the interests of better medicine by Dorsey Laboratories, a division of The Wander Company, Lincoln, Nebraska 68501. Address communications to Keith W. Sehnert, M.D., Medical Director.





this issue: the cold in pregnancy...

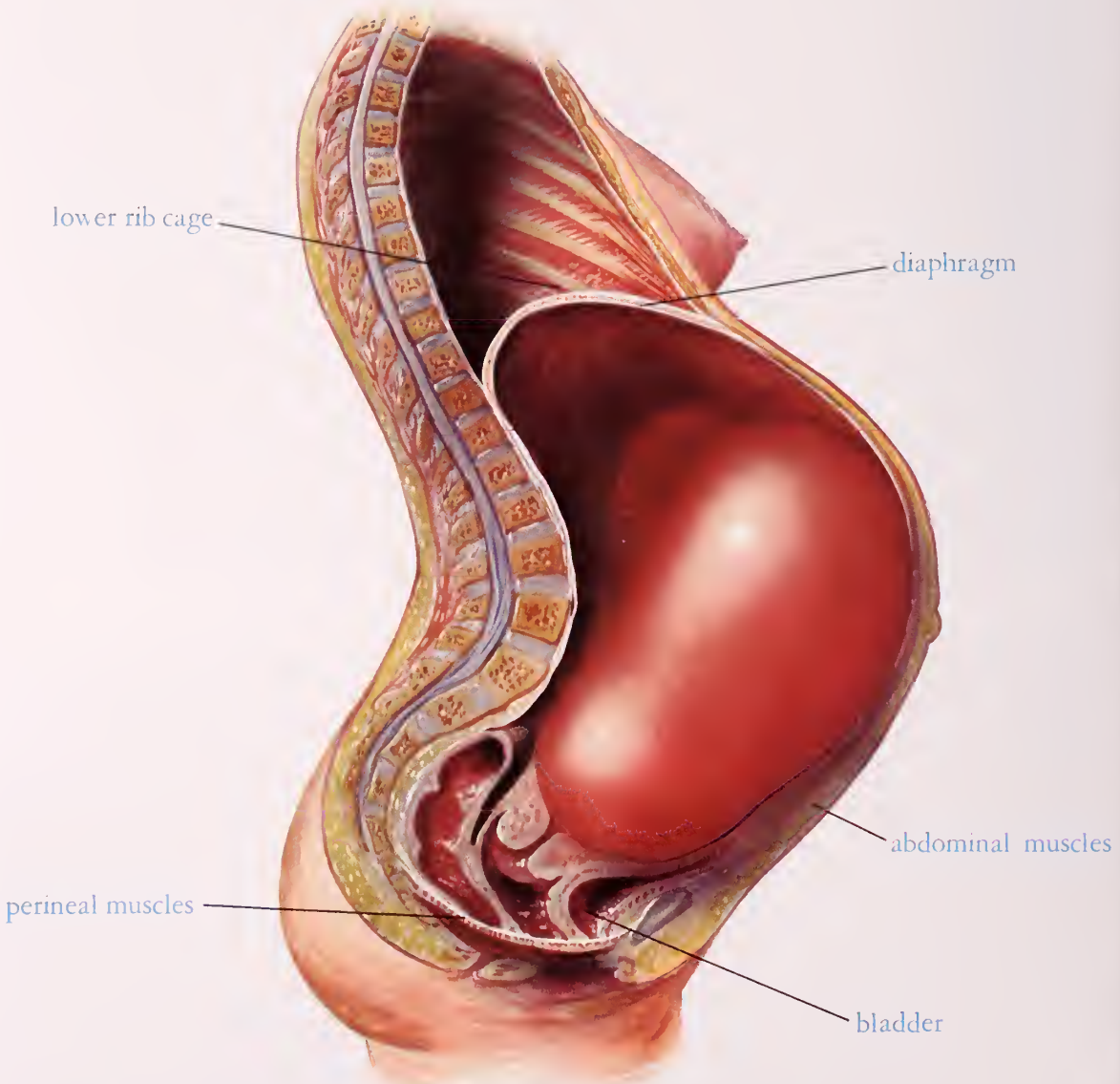
the cold in pregnancy

Frederick W. Goodrich, Jr., M.D.
Senior Obstetrician and Gynecologist, Lawrence and Memorial Hospital, New London, Connecticut

Since pregnancy and the common cold are both ubiquitous, it is not surprising that they often occur at the same time in the same patient. Incidence figures are hard to come by, but the chances are very good that any given pregnant woman will have a cold at some time during the nine months of her gestation. When she does, she will tell you that it is the worst cold she ever had. It seems to last longer and the symptoms are more distressing than they are in the non-pregnant.

For purposes of this discussion, the common cold i considered to be the well-known symptom comple which includes sore throat, stuffy nose, and a cough Febrile states or extension of the disease proces into the lower respiratory tree are not part of th common cold and will not be included in this dis cussion.

The clinical picture of a cold in pregnancy can b confused by a long-known physiological phenome



hon. Kiesselbach's area in the nose (on the anterior part of the nasal septum above the intermaxillary bone) becomes engorged, apparently due to hyperemia induced by the increased estrogen level which accompanies pregnancy. The amount of congestion can vary in degree from woman to woman. Some have very little congestion, others will have occasional nosebleeds from this area, still others will have symptomatic congestion to the degree that they will complain of having a "chronic" or constant cold.

ess well recognized is the occurrence of this type f hyperemia in any part of the nasopharyngeal mucosa, again in varying degree. Such swelling often produces a postnasal drip which, the patient ill state, is present only when she is pregnant. atients who do not have symptomatic congestion rdinarily, will find that when they do get a cold, ne symptoms last much longer than those of a cold sually do. Occasionally, this hyperemia is responble for closure of the medial end of the Eustachian ube; such patients will complain of "plugging" of ne ears. Inspection of the ear drum will show a epression which confirms the presence of Eustaian closure rather than wax in the canal which is ne patient's diagnosis. Symptoms related to this hysiological congestion are more apt to occur in eavier smokers or those who have a history of llergic rhinitis, just as are the symptoms of the mmon cold. And when the cold does occur in egnancy, the symptoms are worse because of the derlying congestion.

he pregnant woman with a cold is miserable for her reasons, dependent somewhat on her parity d the length of her gestation. As parity increases, also does the relaxation of the abdominal and rineal musculature. The uterus, lying against a ck abdominal wall, and bearing down on relaxed rineal muscles, acts like a piston when the patient ughs, sneezes, or even blows her nose, pushing wn on the bladder. Stress incontinence during lds is almost the rule.

the length of gestation increases, so does the size the uterus. As it grows, it pushes the abdominal ntents above it and elevates the diaphragm. This sults eventually in a lateral displacement of the wer rib cage, often to a point at which the patient ll complain of soreness in this area. If such a

(Concluded on following page)

From a continuing study on nasal congestion...



timed to work while your patient does

A study begun in 1966 by the Department of Otolaryngology, Greater Baltimore Medical Center, has accumulated evidence that documents the effectiveness of Triaminic's timed-release action in the treatment of nasal congestion.

With its balanced formulation of an oral nasal decongestant and two antihistamines, Triaminic effected partial or complete relief in more than 82% of the 85 subjects treated. Clearing nasal obstruction. Reducing turbinate swelling. Making breathing easier.

It's a comforting thing to know that Triaminic really works.

Triaminic® *timed-release tablets*

Each timed-release tablet contains:

Phenylpropanolamine hydrochloride	50mg.
Pyrilamine maleate	25mg.
Pheniramine maleate	25mg.

Side effects: Occasional drowsiness, blurred vision, cardiac palpitations, flushing, dizziness, nervousness or gastrointestinal upsets. Precautions: The patient should be advised not to drive a car or operate dangerous machinery if drowsiness occurs. Use with caution in patients with hypertension, heart disease, diabetes or thyrotoxicosis.

(Advertisement)

patient has a cold, the coughing and sneezing will exaggerate this soreness. The diaphragmatic restriction caused by the enlarging uterus also makes breathing more difficult, particularly when the patient lies down. A cold compounds this difficulty.

Treating a cold in pregnancy requires two additional considerations. The patient should be told that the symptoms may last longer lest she become discouraged, and she should be reassured that the treatment will not damage the fetus. Although there are still some women who seem blissfully ignorant regarding matters of health (and these need to be cautioned not to take medication recommended by friends), most of our maternity patients are aware of the thalidomide tragedy. These women need constant reassurance that the symptoms of a cold can be treated, and that the medication is safe. Fortunately, many of the drugs which are of benefit have been in use long enough and widely enough so that such a statement can be offered. Occasionally one encounters a patient who is so anxious to avoid medication that she is extremely reluctant to take anything at all. Since cold is self-limited, it seems reasonable enough to give such a patient the choice and not to force drugs on her if she is obviously afraid of taking them.

The most distressing symptom of the common cold is the nasal congestion. This can be mitigated by the use of a decongestant which will help reduce the postnasal drip and the coughing caused by it. The kind of a cough which is described as a "tickling" in the throat and which is apt to occur when the patient goes to bed is usually due to nasopharyngeal congestion rather than inflammation in the lower respiratory tract.

There are many cough mixtures available. Most contain an antihistamine, a decongestant, and a cough "suppressant." Should cough suppression be desirable, it is important to remember not to use both a decongestant tablet and such a cough mixture as the patient would be getting a double dose of the decongestant. With some patients, the placebo effect of a cough syrup may be important and a liquid preparation might be substituted for an oral tablet.

For a sore throat, candy drops or lozenges at frequent intervals are soothing. It is not only unnecessary but unwise to use antibiotic lozenges or drops. The use of antibiotics in an uncomplicated cold is contraindicated and should be scrupulously avoided.

In summary, a cold in pregnancy is more severe and longer lasting. The treatment of the symptoms with local and systemic decongestants will make the patient more comfortable.

Apparently the cold is so common in pregnancy that it has received very little attention in the literature. References are almost non-existent and the few which are available add little to the common knowledge, are out-dated, or are not helpful. Thus the usual bibliography is not appended.



Relieve his sniffles, her concern, and about half your phone calls. Tell her to get "The Orange Medicine"



Triaminic® syrup

Each teaspoonful (5 ml.) contains:

Phenylpropanolamine hydrochloride	12.5 mg.
Pheniramine maleate	6.25 mg.
Pyrilamine maleate	6.25 mg.

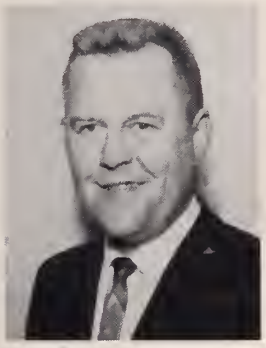
For nasal congestion you can bring quick, lasting comfort to your little patients with Triaminic Syrup. You may occasionally encounter these side effects: drowsiness, blurred vision, cardiac palpitations, flushing, dizziness, nervousness or gastrointestinal upsets. Precautions: the possibility of drowsiness should be considered by patients engaged in mechanical operations requiring alertness. Use with caution in patients with hypertension, heart disease, diabetes, or thyrotoxicosis.

(Advertisement)

ORGANIZATION SECTION

Stimulating Sessions Featuring Prominent National Speakers To Highlight 19th Annual KMA Interim Meeting April 17-18

Five nationally prominent medical authorities have accepted invitations to discuss timely topics of intense interest to Kentucky physicians at the Nineteenth Annual KMA Interim Meeting, April 17 and 18, according to George F. Brockman, M.D., KMA president and chairman of the Interim meeting Program Committee.



Doctor Henningsgaard

The 1968 sessions will be held at the Statler Hilton Motel (formerly the Lamplighter) in Covington, which has excellent meeting facilities, Doctor Brockman said.

The meeting will open April 17 with a dinner in the Statler Hilton ballroom followed by a panel discussion featuring Robert Q. Marston, M.D., Bethesda, Md., head of the Heart, Cancer and Stroke Program. Other members of the panel will be announced at a later date.

Three outstanding presentations are scheduled for the April 18 morning session. Francis Land, M.D., Washington, D.C., administrator of the Title XIX Medical Welfare Program, will discuss "Title XIX in Kentucky."

Blair J. Henningsgaard, M.D., Astoria, Oregon, chairman of the AMPAC Board, will also appear on the morning program. His topic will be announced later. Doctor Henningsgaard, a former president and speaker of the House of Delegates of the Oregon Medical Association, was a member of the AMA House of Delegates from 1963 to 1966 and has long been active in AMA committee work. An internist, Doctor Henningsgaard graduated from the University of Minnesota Medical School in 1943.

Another excellent speaker scheduled to appear on the morning program will be Richard S. Wilbur, M.D., San Francisco, president of the California Blue Shield. Doctor Wilbur's topic will be "Usual and Customary Fees—or Who Says It's Reasonable?"

Philip R. Lee, M.D., secretary for medical affairs in the Department of Health, Education and Welfare, Washington, D.C., will be the guest speaker at the luncheon session closing the meeting. Doctor Lee is



Doctor Lee

a 1948 graduate of the Stanford University School of Medicine. From 1963 to 1965 he served as director of health services in the Agency for International Development, Office of Technical Cooperation and Research. The Agency granted him the Superior Honor Award in 1965 for establishing "new policies, priorities, and programs in the fields of health, nutrition, and population."

In addition to the outstanding program of speakers planned for the Interim Meeting there will be meetings of the KMA Board of Trustees and the Woman's Auxiliary and an Orientation Program for new members.

Doctor Brockman urges all Kentucky physicians to make plans now to attend what promises to be an enlightening and informative meeting.

Three KMA Trustee Districts To Meet in January

The First, Second and Fifth KMA Trustee Districts will hold January meetings according to trustees Joseph R. Miller, M.D., Benton (First), William W. Hall, M.D., Owensboro (Second), and George A. Sehlinger, M.D., Louisville (Fifth.)

KMA President George G. Brockman, M.D., Greenville, will be the featured speaker at each meeting. Fred C. Rainey, M.D., Elizabethtown, chairman of the Committee on Legislative Activities for State Affairs, will appear on the programs January 23 and 24.

The Fifth District will meet at 6 p.m. January 15 at the Executive Inn, Louisville. The Second District will hold its meeting at 6:30 p.m. January 23 at Gabe's Restaurant, Owensboro. The First District will meet at 6:30 p.m. January 24 at the Paducah Country Club.

Wives of physicians in the First and Second Districts will have their own sessions while the districts are holding their meetings.

Dr. Quertermous Reports Results Of KEMPAC Candidate Support

Because a record number of KMA members for an off year joined the Kentucky Educational Medical Political Action Committee (KEMPAC) in 1967, it was able for the first time to provide effective candidate support in a limited number of races in the state legislative races, according to John C. Quertermous, M.D., Murray, chairman of the Board of KEMPAC.

KEMPAC's record of candidate support in both the primary last May and the November 7 general election which was evenly divided between the two parties was more than 80 percent effective. KEMPAC participated in approximately 23 percent of these races. Doctor Quertermous regretted that there were not more funds that would have provided greater participation in the primary and state races.

The KEMPAC Board chairman said that in order to secure KEMPAC funds for candidate support there must be an agreement between local physicians and the KEMPAC Board's committee on the candidate. The local candidate support committee must raise at least as much as is requested from the KEMPAC Board for its candidates in order to qualify for assistance.

"In 1968 we will elect seven Kentucky congressmen and a senator. Congressional campaigns are expensive — often running well into five figures", Doctor Quertermous said. "The members of our Board, in view of the importance of the 1968 election to our country and to our state in making our influence felt, urge physicians and their wives to promptly remit their 1968 dues."

Twenty-eight Ky. Doctors Attend AMA Convention in Houston

Twenty-eight Kentucky physicians attended the annual Clinical Convention of the American Medical Association November 26-29, in Houston, Texas.

The physicians listed below, according to the records of the AMA, attended the convention:

Henry B. Asman, M.D., Louisville
George S. Beard, M.D., Hartford
Thomas H. Biggs, M.D., London
George F. Brockman, M.D., Greenville
Charles G. Bryant, M.D., Louisville
David M. Cox, M.D., Louisville
Roy K. Diamond, M.D., Louisville
Hoyt D. Gardner, M.D., Louisville
J. Thomas Giannini, M.D., Louisville
William W. Hall, M.D., Owensboro
Wreno M. Hall, M.D., Elizabethtown
Annop Intharakoses, M.D., Louisville
R. Hays Johnson, M.D., Louisville
Robert C. Long, M.D., Louisville
Robert T. Longshore, M.D., Covington
Carroll H. Luhr, Jr., M.D., Louisville
Robert W. Lykins, M.D., Louisville
Fitzhugh Mullins, M.D., Louisville
Owen B. Murphy, M.D., Lexington
John C. Quertermous, M.D., Murray
Charles C. Rutledge, M.D., Hazard
Robert J. Salisbury, M.D., Mt. Sterling
Donn L. Smith, M.D., Louisville
Raymond C. Snowden, M.D., Hopkinsville
David B. Stevens, M.D., Lexington
Ira F. Wheeler, M.D., Oneida
Carroll L. Witten, M.D., Louisville
William R. Willard, M.D., Lexington

Dr. Noer Elected President of Southern Surgical Society

Rudolf J. Noer, M.D., professor and chairman of the department of surgery at the University of Louisville School of Medicine, was elected president of the Southern Surgical Society at its annual meeting December 4-6 at The Homestead, Hot Springs, Va. Doctor Noer succeeds Robert J. Coffey, M.D., Washington, D.C.



Doctor Noer

In 1965-66 Doctor Noer served as a vice-president of the Society, a select organization limiting its membership to approximately 300 surgeons. He has also served as president of the Kentucky Surgical Society.

The last Kentucky surgeon to serve as president of the Southern Surgical Society was Francis K. Massie, M.D., Lexington, who held that office in 1960. Vice-presidents elected at the meeting are Eugene Bricker, M.D., St. Louis, Mo., and William Sandusky, M.D., Charlotte, Va.

SMA Meeting Has High Attendance Among Kentucky Physicians

Sixty-six Kentucky physicians attended the 61st Annual Meeting of the Southern Medical Association recently, according to the lists of registrants appearing in the daily bulletins published by the Association. The meeting took place November 13 to 16 in Miami Beach, Florida.

J. Duffy Hancock, M.D., Louisville, a member of the SMA Board of Trustees, and Sam A. Overstreet, M.D., Louisville, councilor, both attended the meeting. Kentucky physicians appearing on the program included Douglas M. Haynes, M.D., and Carroll Witten, M.D., both of Louisville, Ullin W. Leavell, Jr., M.D., Joseph B. Parker, Jr., M.D., and Paul M. Weeks, M.D., all of Lexington.

Kentucky physicians and their wives participating in the post-convention trip to Puerto Rico included Doctor and Mrs. John S. Oldham, Owensboro, Doctor and Mrs. W. W. Nicholson, and Doctor and Mrs. Sam A. Overstreet, of Louisville.

A complete list of Kentucky physicians attending the meeting follows:

John D. Allen, M.D., Louisville
Raleigh R. Archer, M.D., Lexington
William H. Armbruster, M.D., Louisville
H. K. Bailey, M.D., Ashland
William H. Barnard, M.D., Elizabethtown
C. M. Brassfield, M.D., Elizabethtown

Grace Brown, M.D., Corbin
William M. Brown, M.D., Corbin
Glenn W. Bryant, M.D., Louisville
W. Michael Bryant, M.D., Lexington
Donald Chatham, M.D., Shelbyville
Robert H. Cofield, M.D., Covington
B. F. Combs, M.D., Lexington
William H. Cox, M.D., Paris
O. A. Cull, M.D., Quenton
B. Cymbala, M.D., Henderson
Malcolm H. Fine, M.D., Louisville
John B. Floyd, Jr., M.D., Lexington
J. Luther Fuller, M.D., Louisville
Michael L. Furcolow, M.D., Lexington
Douglas L. Gillim, M.D., Louisville
John D. Gordinier, M.D., Louisville
William J. Graul, M.D., Versailles
Cecil L. Grumbles, M.D., Louisville
C. Noel Hall, M.D., Versailles
J. Duffy Hancock, M.D., Louisville
O. J. Hayes, M.D., Louisville
Douglas M. Haynes, M.D., Louisville
Richard F. Hench, M.D., Lexington
Donald G. Hughes, M.D., Murray
Edwin L. Jones, M.D., Mt. Sterling
Raymond E. Jones, M.D., Louisville
Charles L. Justice, Jr., M.D., Ludlow
Maurice Kaufmann, M.D., Lexington
U. W. Leavell, M.D., Lexington
Blaine Lewis, M.D., Louisville
Joseph Liebman, M.D., Frankfort
Andrew M. Moore, M.D., Lexington
Paul F. Maddox, M.D., Campton
J. B. Marshall, M.D., Louisville
Charles T. Moran, M.D., Louisville
William W. Nicholson, M.D., Louisville
Ethel H. O'Brien, M.D., Louisville
John S. Oldham, M.D., Owensboro
Robert G. Overstreet, M.D., Louisville
Sam A. Overstreet, M.D., Louisville
Joseph B. Parker Jr., M.D., Lexington
Leland E. Payton, M.D., Lynch
C. Kenneth Peters, M.D., Jeffersontown
George J. Petro, M.D., Louisville
F. M. Picklesimer, M.D., Paintsville
Howard L. Ravenscraft, M.D., Hebron
Arthur B. Richards, M.D., Louisa
Joseph Schickel, M.D., Burkesville
Pedro A. Segarra, M.D., Louisville
Frank K. Sewell, M.D., Mt. Sterling
C. R. Shaw, M.D., Louisville
Paul R. Smith, M.D., London
Thomas G. Stigall, M.D., Louisville
Wilbert M. Twyman, M.D., Louisville
Vernard F. Voss, M.D., Louisville
Gene T. Watts, M.D., Hindman
Paul M. Weeks, M.D., Lexington
William G. West, Jr., M.D., Madisonville
Carroll L. Witten, M.D., Louisville
William R. Yates, M.D., Bloomfield

U of L Oral Cancer Symposium Scheduled February 10

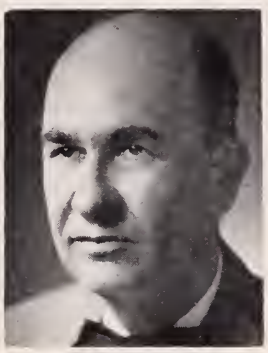
"Epidemiology of Oropharyngeal Cancer" will be the theme of a one-day symposium planned February 10 by the University of Louisville School of Medicine's Oral Cancer Diagnostic Program, according to Condict Moore, M.D., program director.

Prominent out-of-state guest speakers featured on the program will include Louis Rosenfeld, M.D., Nashville, Tenn., whose topic will be "Snuff Dippers Cancer"; Andrew Z. Keller, M.D., Washington, D.C., who will discuss "Characteristics of Males with Cancer of the Mouth and Pharynx"; Ernest Wynder, M.D., New York, N.Y., who will present "Etiology and Prevention of Cancer of the Oral Cavity"; and Donald P. Shedd, M.D., Buffalo, N.Y., who will discuss "Palm Trees and Oral Cancer" in a joint session with Carl F. VonEssen, M.D., New Haven, Conn.

The symposium will begin at 8:30 a.m. in the Rankin Amphitheatre of Louisville General Hospital. All physicians are welcome, Doctor Moore said.

Dr. G. L. Simpson Day Proclaimed Dec. 2 in Muhlenberg County

In recognition of his 35 years of service to the citizens of Muhlenberg County, Gaithel L. Simpson, M.D., Greenville, was honored December 2 by proclamations naming that date "Dr. G. L. Simpson Day."


Doctor Simpson

The proclamations were presented by Greenville Mayor Ed Payne and County Judge Philip Stone on the occasion of the dedication of a new 60-bed wing at Muhlenberg Community Hospital. Doctor Simpson was instrumental in the building of the original hospital and in maintaining the high standards for which it has been approved by the Joint Commission on Accreditation of Hospitals since 1957.

On hand to congratulate Doctor Simpson during the ceremonies was KMA President George F. Brockman, M.D., Greenville. Doctor Simpson was president of KMA in 1961-62. The hospital staff presented Doctor Simpson with his portrait which will hang in the new hospital wing.

Automobile Safety Study Enters Third Phase of Program in Ky.

The third phase of a second three-year research study aimed at making automobiles safer began January 1 in Kentucky. The nature and specific causes of injury to occupants of recent model passenger cars involved in rural accidents are the primary considerations in the current study.

The program is sponsored by KMA, Kentucky State Department of Health, Kentucky Hospital Association and the Kentucky State Police in cooperation with Cornell University. The third six-month phase of the program will take place in Adair, Breckinridge, Bullitt, Casey, Clinton, Cumberland, Grayson, Green, Hardin, Jefferson, Larue, Marion, Meade, Metcalfe, Monroe, Nelson, Russell, Taylor and Washington Counties.

If you are a physician in one of these counties, you may be asked to participate in this Automotive Crash Injury Research data collecting project. Whenever an occupant of a passenger car of a last five-year's model is injured or killed, a state police officer will provide you with a special medical

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report form to record specific information on injuries.

William Keller, M.D., Louisville, KMA Highway Safety Committee chairman, urges your cooperation in this effort to reduce deaths and injuries in future auto accidents.



KMA President George F. Brockmon, M.D., Greenville, who has done two tours of duty on the AMA Volunteer Physicians for Viet Nam Program, is shown with Hyde Kimmick, M.D., of Springfield, Ill. orthopedic surgeon who also has served under the same program in Viet Nam. The picture was made during the November AMA Clinical Convention in a television station prior to their participation in a television program on Viet Nam.

Lexington Clinic Conf. Planned

The Thirteenth Annual Lexington Clinic Conference has been scheduled for March 28, according to James W. Bard, M.D., Lexington, program chairman. "Adolescent Medicine" will be the theme of the one day symposium.

Some of the topics planned for discussion at the conference include venereal diseases, health problems of olympic athletes, psycho-social problems of adolescence and psychedelic drugs. Complete details will follow in the February issue.

Coroners Elect Dr. Ramey Sec.

James W. Ramey, M.D., Weisiger Woods, coroner of Boyle County, was named secretary of the Kentucky State Coroners Association at a seminar held in Frankfort November 25, according to a recent press report. Doctor Ramey was elected coroner of Boyle County in 1965.

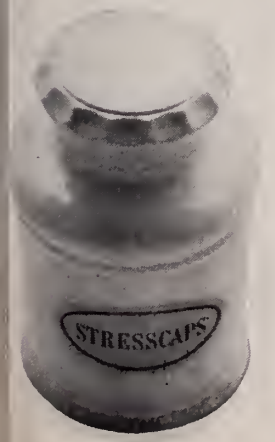
AMTA Tennis Tournament Set

The first tournament of the new American Medical Tennis Association will be held February 14-in Ft. Lauderdale, Fla. The entry fee is $5 and the deadline is February 7. Further information may be obtained from Rx Golf and Travel magazine, Box 25125, Oklahoma City, Okla. 73125.



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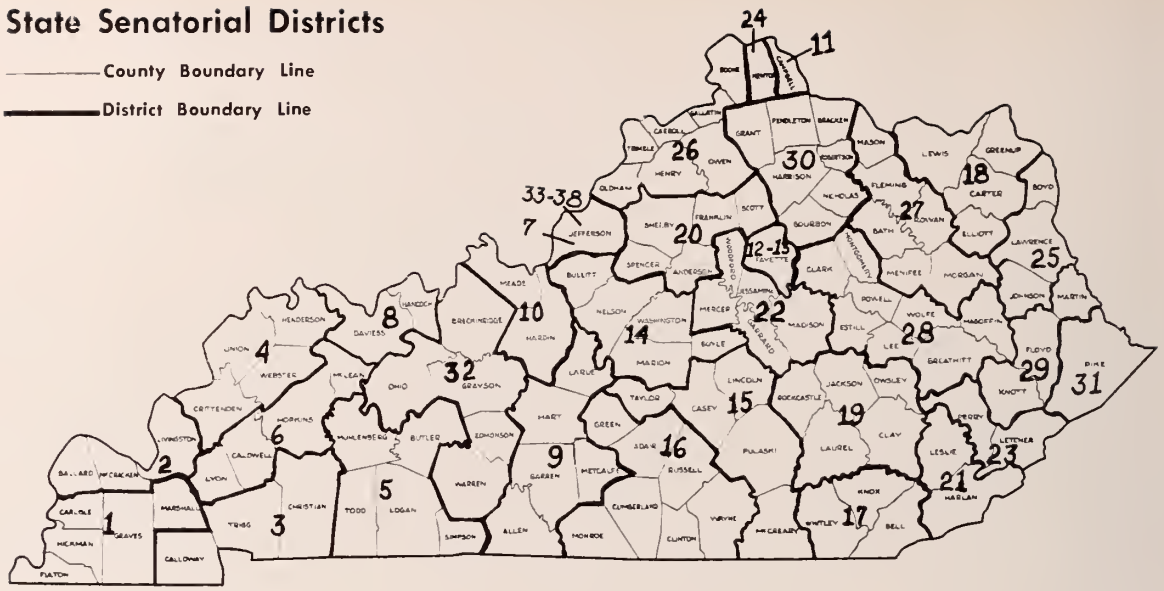
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Ky. Senate and House Rosters Listed for 1968 Assembly

In order that you might have a complete list of the 38 senators and 100 representatives who will participate in the 1968 Kentucky General Assembly, the Journal is once again printing their names, addresses and districts, and including maps to show the counties they will serve.

Twenty-four of the senators are Democrats and 14 are Republicans. In the senate there will be 18 new members. The House is composed of 57 Democrats and 43 Republicans. Of the total membership, 52 of the representatives are new.

Kentucky General Assembly 1968 Senate Roster

District	Home County	Senators
1	Graves	Carroll Hubbard, Jr. (D), Mayfield
2	McCracken	Tom Garrett (D), Paducah
3	Christian	Pat M. McCuiston (D), Pembroke
4	Henderson	William L. Sullivan (D), Henderson
5	Todd	Carl T. Hadden, Sr. (D), Elkton
6	Hopkins	Richard L. Frymire (D), Madisonville
7	Jefferson	Richard Chin (R) Valley Station
8	Daviess	Delbert S. Murphy (D), Owensboro
9	Allen	J. C. Carter (R), Scottsville
10	Hardin	Walter (Dee) Huddleston (D), Elizabethtown
11	Campbell	Donald L. Johnson (R), Ft. Thomas
12	Fayette	C. Gibson Downing (D), Lexington
13	Fayette	Robert Douglas Flynn (R), Lexington
14	Bullitt	J. D. (Jiggs) Buckman (D), Shepherdsville
15	Pulaski	Norman E. Farris (R), Science Hill
16	Cumberland	William C. Mann (R), Burkesville
17	Whitley	Charles B. Upton (R), Williamsburg
18	Elliott	James E. (Jim) Lewis (D), Sandy Hook
19	Clay	Fred Bishop (R), Manchester
20	Franklin	Lawrence W. Wetherby (D), Frankfort
21	Harlan	James C. Brock (R), Harlan
22	Madison	Edward A. Murphy (D), Richmond
23	Perry	Pearl Strong (D), Darfork
24	Kenton	Clyde W. Middleton (R), Ft. Mitchell
25	Johnson	Wendell Van Hoose (R), Tutor Key
26	Carroll	Tom Harris (D), Worthville
27	Morgan	Joe D. Stacy (D), West Liberty
28	Breathitt	John Raymond Turner (D), Jackson
29	Floyd	Clifford B. Latta (D), Prestonsburg
30	Harrison	Wilson Palmer (D), Cynthiana
31	Pike	F. M. Burke (D), Pikeville
32	Warren	Floyd Hayes Ellis (D), Rockfield
33	Jefferson	Georgia M. Davis (D), Louisville
34	Jefferson	Walter S. Reichert (R), Louisville
35	Jefferson	Romano L. Mazzoli (D), Louisville
36	Jefferson	Scott Miller, Jr. (R), Louisville
37	Jefferson	Henry Beach (D), Louisville
38	Jefferson	Vernon C. McGinty (R), Louisville

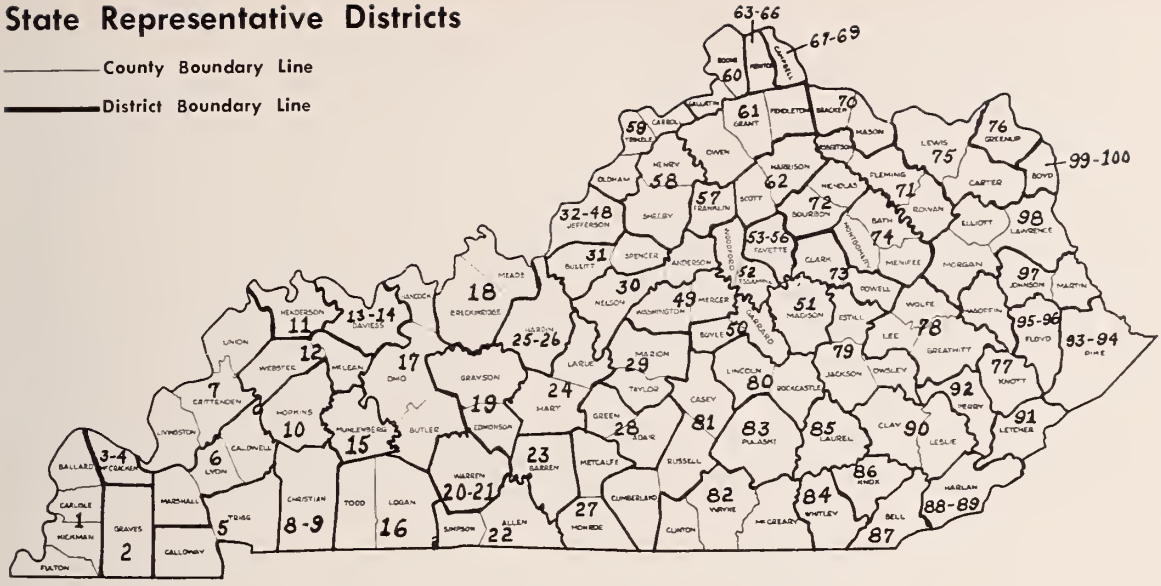
Kentucky General Assembly 1968 House Roster

District	Home County	Representatives
1	Fulton	Henry Maddox (D), Hickman
2	Graves	Lloyd Edward Clapp (D), Wingo
3	McCracken	Julian M. Carroll (D), West Paducah
4	McCracken	Fred Morgan (D), Paducah
5	Calloway	Charles Lassiter (D), Murray
6	Marshall	Shelby McCallum (D), Benton
7	Union	J. Quentin Wesley (R), Sturgis
8	Christian	John O. Hardin III (D), Hopkinsville
9	Christian	James E. Bruce (D), Hopkinsville
10	Hopkins	William M. Cox (D), Madisonville
11	Henderson	John Stanley Hoffman (D), Henderson
12	McLean	Richard (Hoppy) Hopkins (D), Calhoun
13	Daviess	George H. Greer (R), Owensboro
14	Daviess	Donald J. Blanford (D), Philpot
15	Muhlenberg	L. H. Richey (R), Bremen
16	Todd	Hayes A. Hampton (D), Trenton
17	Ohio	Theron Kessinger (R), Beaver Dam
18	Breckinridge	H. W. (Wathen) Tobin (D), Hardinsburg
19	Edmonson	Walter F. Davis (R), Brownsville

State Representative Districts

County Boundary Line

District Boundary Line



20	Warren	George T. Massey, Jr. (D), Bowling Green
21	Warren	Edward G. Brown (D), Bowling Green
22	Allen	T. C. Simmons (R), Scottsville
23	Barren	Walter A. Baker (R), Glasgow
24	Larue	R. K. Keith (R), Hodgenville
25	Hardin	Jon Rickert (D), Elizabethtown
26	Hardin	Joseph W. Prather (D), Vine Grove
27	Monroe	Carl H. Bowles (R), Tompkinsville
28	Green	Frank C. Sartin (R), Greensburg
29	Taylor	Herman W. Ratliff (R), Campbellsville
30	Nelson	Bernard Keene (D), Bardstown
31	Bullitt	Leo Bleemel (D), Mt. Washington
32	Jefferson	E. Bruce Blythe (R), Louisville
33	Jefferson	Allen E. Russell (R), Louisville
34	Jefferson	Louis E. Ballenger (R), Louisville
35	Jefferson	Charles W. Vanover (R), Louisvile
36	Jefferson	Clarence R. (Dumps) Miller (D), Louisville
37	Jefferson	Robert L. Miller (R), Louisville
38	Jefferson	Dexter S. Wright (R), Louisville
39	Jefferson	Tom Ray (D), Louisville
40	Jefferson	George R. Siemens (D), Louisville
41	Jefferson	Mrs. Mae Street Kidd (D), Louisville
42	Jefferson	Hughes E. McGill (D), Louisville
43	Jefferson	Norbert L. Blume (D), Louisville
44	Jefferson	Charles J. Jones (R), Louisville
45	Jefferson	Joseph H. Melton (R), Valley Station
46	Jefferson	M. T. (Tommy) Riddle (R), Louisville
47	Jefferson	Mrs. W. C. (Marge) Cruse (R), Louisville
48	Jefferson	Eugene P. Stuart (R), Louisville
49	Mercer	L. C. James (D), Harrodsburg
50	Boyle	Howard P. Hunt (D), Danville
51	Madison	Dwight Wells (D), Richmond
52	Woodford	James T. Alexander (D), Versailles
53	Fayette	Foster Pettit (D), Lexington
54	Fayette	Graddy Johnson (R), Lexington
55	Fayette	Don Ball (R), Lexington
56	Fayette	Robert Paul Wooley (R), Lexington
57	Franklin	William P. Curlin, Jr. (D), Frankfort
58	Shelby	Ralph Mitchell (D), Shelbyville
59	Carroll	W. J. (Jay) Louden (D), Carrollton
60	Boone	Leo Dawson (R), Hebron
61	Grant	Franklin Webster (D), Williamstown
62	Scott	W. K. (Bill) Henry (D), Georgetown
63	Kenton	Kenneth F. Harper (R), Ft. Mitchell
64	Kenton	Phillip E. King (D), Covington
65	Kenton	John J. Isler (D), Covington
66	Kenton	Carle Mershon (D), Ludlow
67	Campbell	James E. Murphy (D), Newport
68	Campbell	Carl A. Bamberger (R), Bellevue
69	Campbell	Arthur L. Schmidt (R), Cold Spring
70	Mason	Mitchel B. Denham, M.D. (D), Maysville
71	Rowan	Sherman R. Arnett (D), Clearfield
72	Bourbon	Brooks Hinkle (D), Paris
73	Clark	Charles T. (Tim) Walters (D), Winchester
74	Montgomery	Mrs. Nell Guy McNamara (D), Mt. Sterling
75	Carter	James A. (Jim) Davis (R), Grayson
76	Greenup	W. Terry McBrayer (D), Greenup
77	Magoffin	Darvin Allen (D), Royalton
78	Breathitt	Russell Reynolds (D), Jackson
79	Jackson	Lloyd McKinney (R), McKee
80	Lincoln	Wm. Harold DeMarcus (R), Stanford
81	Russell	Orvin G. Coffey (R), Jamestown
82	Wayne	Randolph Smith (R), Monticello
83	Pulaski	Lavey Floyd (R), Pointer
84	Whitley	Will K. Peace (R), Williamsburg
85	Laurel	Gene Huff (R), London
86	Knox	Buford Clark (R), Barbourville
87	Bell	Henry M. Hoe (R), Middlesboro
88	Harlan	Lawrence Lankford (D), Cawood
89	Harlan	Needham Saylor (D), Wallins
90	Clay	John E. White (R), Manchester
91	Letcher	Enoch Oliver Holbrook (D), Mayking
92	Perry	Ed Dawhare (D), Hazard
93	Pike	James C. Justice (D), Millard
94	Pike	Gether Irick (D), Stone
95	Floyd	W. J. (Bill) Reynolds (D), Allen
96	Floyd	Everett Akers (D), Martin
97	Johnson	Mrs. Ruth Wolchick (R), Paintsville
98	Morgan	Woodford F. May (D), Woodsbend
99	Boyd	Ronald B. Halleck (R), Ashland
100	Boyd	Charles D. Wheeler (R), Ashland



Construction of the two million dollar Kentucky Lions Eye Research Institute began in November 1967. Upon completion in approximately a year and a half, this building will be turned over to the University of Louisville School of Medicine for use by the Department of Ophthalmology in its various clinical and research activities. The Kentucky Lions Eye Bank and clinic will also be housed in the building.
(Photo courtesy of the *Courier-Journal*, Louisville, Ky.)

Dr. Rosenbaum Addresses RSNA

Harold D. Rosenbaum, M.D., Lexington, professor and chairman of the department of radiology in the UK College of Medicine, spoke before the Radiological Society of North America during the Society's annual meeting November 26-December 1 in Chicago. Doctor Rosenbaum's address, entitled "Pulmonary Parenchymal Spread of Juvenile Laryngeal Papillomatosis," was co-authored by S. A. Manuchehr Alavi, M.D., and Lester R. Bryant, M.D., both of Lexington.

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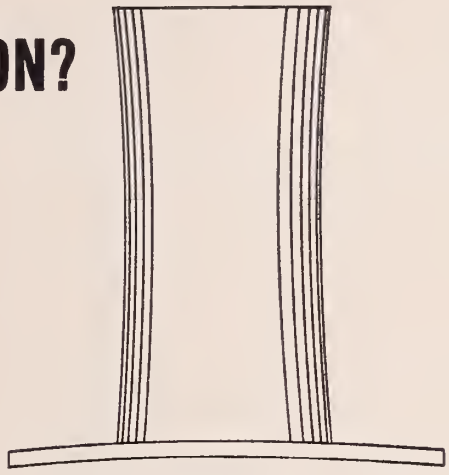
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In Memoriam

ARTHUR M. BARNETT, M.D.
Louisville
1871-1967

Arthur M. Barnett, M.D., 96, a retired Louisville physician, died December 17 at Hazelwood Tuberculosis Hospital. Doctor Barnett graduated from Louisville Medical College in 1896 and practiced in Louisville for 50 years until his retirement in 1950. organization

BENJAMIN J. BOLIN, M.D.
Columbia
1884-1967

Benjamin J. Bolin, M.D., 83, a retired Columbia physician, died November 16 at Summit Manor Nursing Home. Doctor Bolin graduated from the University of Louisville Medical School in 1910 and after further study in New Orleans, he began his practice in central Kentucky, later moving to Columbia.

W. HERSCHEL CAVE, M.D.
Formerly of Henderson
1912-1967

W. Herschel Cave, M.D., 55, a former Henderson surgeon, died November 19 at Memorial Hospital, Springfield, Ill. Doctor Cave had practiced in Henderson for 15 years and was practicing in Jacksonville, Ill., at the time of his death. He graduated from the Vanderbilt University School of Medicine in 1938.

JAMES HARVEY HESTER, M.D.
Formerly of Louisville
1878-1967

James Harvey Hester, M.D., 89, a former Louisville physician, died December 11 in New Smyrna Beach, Fla., where he had lived since his retirement in 1945. He had practiced in Louisville since 1912 and was the founder of the Louisville Eye, Ear, Nose and Throat Clinic.

WILLIAM HENRY VANDERBILT JONES, M.D.
Louisville
1884-1967

William Henry Vanderbilt Jones, M.D., 83, a retired Louisville physician, died December 14 at SS. Mary & Elizabeth Hospital. Doctor Jones graduated from the University of Louisville School of Medicine in 1910 and began practice in his native state of West Virginia. He practiced in Louisville from 1928 until his retirement in 1965.

BARTON L. RAMSEY, JR., M.D.
Somerset
1922-1967

Barton L. Ramsey, Jr., M.D., 45, Somerset, an obstetrician, died suddenly November 24 at the Somerset City Hospital. Death was attributed to a heart attack. Doctor Ramsey, an active participant in KMA committee work, graduated from the University of Louisville School of Medicine in 1946. He had practiced in Somerset since 1950. Doctor Ramsey was a member of the Kentucky Obstetrical and Gynecological Society.

The Physician's Role in Learning Disorders

(Continued from Page 42)

a health problem. With control of many diseases which previously threatened the life and health of school children, and with advancing knowledge in the field of child neurology, the physician has every reason to be concerned about this important aspect of the patient's life.

Literature on the subject of learning disabilities is often conflicting, and little is taught to the medical student about this important subject. This material in this article is submitted from review of the literature and from experience with children who have school problems. It is hoped to thus simplify this fascinating subject for the physician of the school age child.

References

1. Apgar, V., Girdany, B. R., McIntosh, R., and Taylor, H. C.: Neonatal Anoxia: I: A Study of the Relation of Oxygenation at Birth to Intellectual Development. *Ped.* 15: 635-661, 1955
2. Bender, L.: A Visual Motor Gestalt Test and Its Clinical Use. *Am. Orthypsych. Assn.* 1938
3. Birch, Herbert G.: *Brain Damage in Children.* Baltimore-Williams-Wilkins Co.
4. Boshes, B., and Myklebust, H. R.: A Neurological and Behavioral Study of Children with Learning Disorders. *Neurol.* 14:7 1964
5. Abercrombie, M.L.J.: Perceptual and Visuo-motor Disorders in Cerebral Palsy. *Little Club Clinics #10* 1964 (monograph)
6. Chao, D.: Drug Therapy in Paroxysmal Cerebral Disorders. *Ped. Cl. N.A. 10:* 3-15, February 1963
7. Chao, D.: Toxic Reactions and Clinical Usefulness of Diphenyl Hydantoin *Ped.* 31: 526 1963
8. Crawley, J. and Kellaway, P.: The Electroencephalogram in Pediatrics. *Ped. Cl. N. A. 10:* 17-51 February 1963
9. Crothers, B., and Paine, R. S.: *A Natural History of Cerebral Palsy,* Howard University Press, 1959
10. Clements, Sam D., Lehtinen, L. E., Lukens, J. E.: *Children with Minimal Brain Injury,* Nat'l Society for Crippled Children and Adults, 1964
11. Farmer, Thomas W.: *Pediatric Neurology,* Harper and Row, New York, 1964
12. Gesell, A. and Amatueda, C.: *Developmental Disgnosis,* New York, Paul J. Hoeber, Inc., 1962
13. Illingworth, R. S.: *The Development of the Infant and Young Child,* Baltimore, Williams-Wilkins Co. 1966
14. Hellmuth, J. ed, Learning Disorders, Vol. 1, Seattle, *Special Child Publications,* 1965
15. Hellmuth, J. ed.,: Learning Disorders, Vol. 2, Seattle, *Special Child Publications,* 1966
16. Hoffman, Wm. W.: Cerebellar Lesions After Parenteral Dilantin Administration Vol. 8, *Neurology* Page 210, 1958
17. Lewis, Richard S.: *The Brain Injured Child (The Perceptually Handicapped)* National Society for Crippled Children and Adults. Parent Series #10, 1963
18. Cerebral Dysfunction. *Little Club Clinics #10,* 1963
19. *Arch. Ped.,* New York 77:247, 1960
20. Strauss, A. A. and Lehtinen, L.: *Psychopathology and Education of the Brain Injured Child.* Grune and Stratton, 1947

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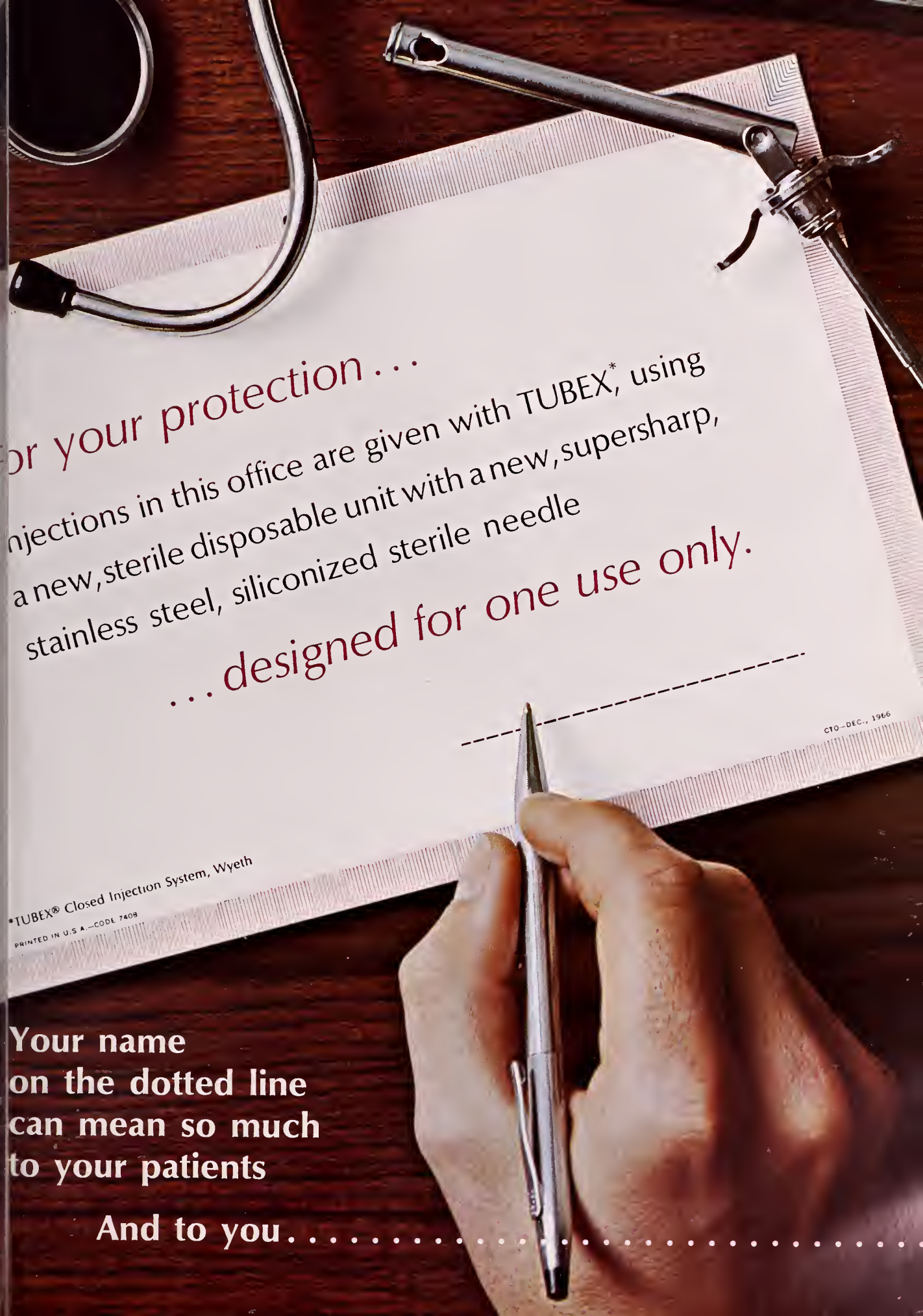
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KMA Committee Reports

McDowell House Board of Managers

Laman A. Gray, M.D., Louisville, Chairman

McDowell House, Danville, Kentucky **October 25, 1967**

The McDowell House Board of Managers, in its first of two meetings scheduled during the final three months of 1967, reviewed the operations of the McDowell House, recent contributions and current financial status in addition to proposed plans for the submission of a budget for the 1968-69 fiscal year.

A preliminary report on a new membership campaign was presented whereby a selected group of physicians in specific areas of the country are being issued invitations for membership in the McDowell House. Reports concerning past exhibits relating to the House were accepted for information.

Cancer Coordinating Committee

Condict Moore, M.D., Louisville, Chairman

KMA Headquarters Office **October 25, 1967**

The Cancer Coordinating Committee confined most of its business at a recent meeting to discussion of the State Cancer Registry. The recommendations approved by the committee requested continued support of the State Cancer Registry, coordination between the 14 approved Kentucky hospital registries and the State Registry and a periodic evaluation of the Registry program by this committee.

Prior to adjournment, the committee members agreed to meet again during this calendar year for the purpose of discussing a more workable state program with representatives of the 14 hospitals now having a cancer registry.

Scientific Program Committee

Peter P. Bosomworth, M.D., Lexington, Chairman

KMA Headquarters Office **November 1, 1967**

The KMA Scientific Program Committee met for the purpose of planning the Scientific Session for the 1968 KMA Annual Meeting next September 24-26. General Sessions were planned for Tuesday morning, all day Wednesday and Thursday morning. Specialty groups were scheduled to have sessions on Tuesday and Thursday afternoons.

In formulating a diversified program, the committee members established themes, "Drug Therapy", "Emergency Medical Services", and "Human Sexuality" to be utilized during the three-day session. It was agreed that final arrangements for the Scientific Sessions would be made on December 14 when the presidents of the participating specialty groups would meet with the KMA President and chairman of this committee.

Senior Day Committee

Hoyt D. Gardner, M.D., Louisville, Chairman

KMA Headquarters Office **November 9, 1967**

Members of the Senior Day Committee set the annual KMA Senior Day program for the University of Louisville on Monday, March 18, and for the University of Kentucky on Tuesday, April 9, at their recent meeting.

The complete program for the senior medical students at each of the state's medical schools was finalized and routine promotional plans were authorized. The addition of one new subject and the combination of other subjects previously presented was a committee action designed to strengthen the two sessions.

Committee on Legislative Activities

Hoyt D. Gardner, M.D., Louisville, Chairman, National Affairs
Fred C. Rainey, M.D., Elizabethtown, Chairman, State Affairs

KMA Headquarters Office **November 16, 1967**

The Committee on Legislative Activities held its first meeting of this Associational year on November 16 to discuss legislation which may be introduced into the Kentucky General Assembly.

KMA-KNA Joint Advisory Committee

Miss Ruth Spurrier, R.N., Frankfort, Chairman
A. Evan Overstreet, M.D., Louisville, Physicians' Chairman

KMA Headquarters Office **November 16, 1967**

The Joint Advisory Committee of the Kentucky Medical Association and the Kentucky Nurses Association recently held their initial meeting of the 1967-68 Associational year with Ruth Spurrier, R. N. of the Kentucky Nurses Association presiding.

Prime considerations in the discussion of physician-nurse relations were the qualifications of anesthetists, registered nurses' responsibility in Intensive Coronary Care Units, administration of intravenous fluids and nurse education. The committee plans another meeting in the spring of 1968.

Educational Television Committee

William P. VonderHaar, M.D., Louisville, Chairman

KMA Headquarters Office **November 22, 1967**

The Educational Television Committee considered more detailed plans for utilization of E-TV by the medical profession and agreed that the involvement of paramedical groups in the committee's activities would be beneficial.

Specific matters that should be included in a grant proposal to fund an intial E-TV program were finalized, and uses of E-TV for both continuing medical education and health education were discussed. The next meeting of the committee is being held on January 17.

(Continued on Page 96)



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(Continued from Page 93)

Technical Advisory Committee on Indigent Medical Care (Title XIX of the Social Security Act)

Carroll H. Robie, Jr., M.D., Lousiville, Chairman

KMA Headquarters Office **November 26, 1967**

The Technical Advisory Committee on Indigent Medical Care met on November 26 to discuss what would be presented to the Advisory Council on Medical Assistance at its meeting on November 29.

Mr. Evan Ray, director of Medical Services of the Medical Assistance Division of the State Department of Health was a guest at this meeting.

Committee on Medical Education

Walter I. Hume, Jr., M.D., Louisville, Chairman

KMA Headquarters Office **November 30, 1967**

Meeting for the first time under the new KMA organizational structure, the Committee on Medical Education outlined the committee's responsibility and discussed its goals for the year. A detailed report was presented on PL-89-239 (Heart, Cancer, and Stroke) and a general discussion was held on the Conference on Medical Education to be held at Park Mammoth Resort January 26-27.

The committee submitted recommendations to the Board of Trustees relating to AMA-ERF and KMA's Representatives to the Student AMA at U of L and UK. Other matters considered were the Post Graduate Medical Education Fund and the Coronary Care Units subcommittee. The next meeting of the committee will be on March 7, 1968.

Coordinating Commission on Governmental Medical Services

Paul J. Parks, M.D., Bowling Green, Chairman

KMA Headquarters Office **December 6, 1967**

The Coordinating Commission on Governmental Medical Services held its first meeting on December 6. This Commission is composed of the chairmen of the Technical Advisory Committee on Indigent Medical Care, Title XIX of the Social Security Act; Governmental Contracts Review Committee; Advisory Committee on Title XVIII of the Social Security Act; Committee on Appalachian and OEO Programs; and the Committee on Medical Education, and serves as the Association's authoritative body on all Government Medical Programs.

McDowell House Board of Managers

Laman A. Gray, M.D., Louisville, Chairman

McDowell House
Danville, Kentucky **December 13, 1967**

The second meeting within two months was held December 13, 1967 by the McDowell House Board of Managers. The members of the Board inspected the House and reviewed its overall operation.

A financial report was presented and a budget approved for the 1968-69 fiscal year. The current membership campaign was discussed, and in addition, it was noted that the number of visitors had increased in 1967 over the previous high year of 1966. The next meeting of the Board was set for March 27, 1968.

Committee on Appalachian and OEO Programs

Frank M. Gaines, Jr., M.D., Louisville, Chairman

Brown Suburban Hotel **December 13, 1967**

The Committee on Appalachian and OEO Programs met on December 13. Mr. John D. Whisman, regional representative of the Appalachian Regional Commission in Washington, was the guest speaker. He discussed with the committee members the Demonstration Health Project in the 11 counties in southeastern Kentucky.

Disaster Medical Care Committee

William T. Rumage, Jr., M.D., Louisville, Chairman

KMA Headquarters Office **December 13, 1967**

The Disaster Medical Care Committee had a number of guests representing allied groups at its December meeting. Major consideration was given to the emergency medical services aspect of the Highway Safety Act, highway identification of hospitals, transportation of the sick and injured, packaged disaster hospitals and medical self-help.

The committee members discussed plans for conducting a live color TV presentation on emergency medical care during the 1968 KMA Annual Meeting and made plans to hold their next meeting during the spring of 1968.

Specialty Group Presidents

Peter P. Bosomworth, M.D., Lexington, Presiding

KMA Headquarters Office **December 14, 1967**

The annual meeting of the Presidents of the 15 Specialty Groups cooperating in the presentation of the 1968 Annual Meeting was completed with plans finalized for the scientific program and participation of the Specialty Groups.

It was agreed that eight Specialty Groups would meet on Tuesday and eight on Thursday afternoons during the KMA annual session. Visiting guest speakers were assigned to present individual papers or appear on a color TV program during the meeting.

Scientific Program Committee

Peter P. Bosomworth, M.D., Lexington, Chairman

KMA Headquarters Office **December 14, 1967**

The Scientific Program Committee recently held meetings on December 6 and 14, the second and third meetings of the committee during this Associational year.

The more than usual number of committee meetings resulted from the committee receiving information that closed circuit color television would be available to them for use during the 1968 KMA annual session. Seven hours of color TV for the Annual Meeting was planned and the entire scientific program finalized in the three committee meetings held.



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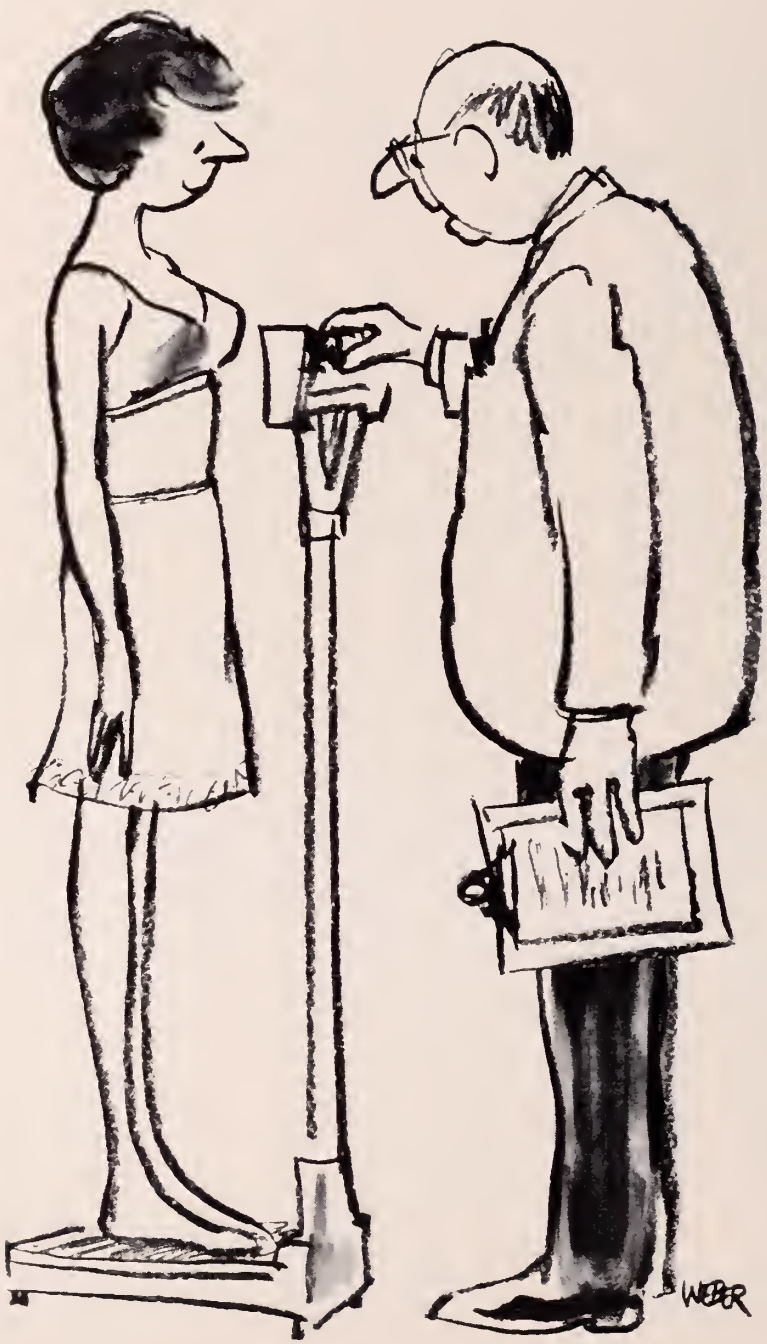
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Thoracic Society Elects Officers

Joseph H. Humpert, M.D., South Ft. Mitchell, was named president-elect of the Kentucky Thoracic Society at its fall scientific session November 17 and 18 in Berea. E. R. Gernert, M.D., Louisville, was installed as president for the coming year.

Paul Pichardo, M.D., Glasgow, was elected secretary-treasurer of the society. Grober Sanders, M.D., Louisville, will continue his three-year term as representative councilor to the American Thoracic Society.

PUBLIC HEALTH PAGE

(Continued from Page 10)

general agreement that significant causal factors related to complications of pregnancies and birth malformations are important items to be included on the birth certificates. With this information it would be possible for medical groups and researchers to assimilate analytical information and develop recommendations which could prevent birth anomalies and fetal wastage and save lives.

AMA House of Delegates

(Continued from Page 72)

9. By maintaining the impetus of dedicated men and women in providing excellent health care by preserving the incentives and effectiveness of unshackled medical practice.

10. By maintaining the highest level of ethics and professional standards among all members of the medical profession.

11. By continuing to provide leadership and guidance to the medical profession of the world in meeting the health needs of changing populations.

Additional Actions

A memorial to Percy E. Hopkins, M.D., was read to the House and a copy was sent to Doctor Hopkins' widow. Doctor Hopkins served as a Trustee for seven years, the last four as its chairman. He also served for eight years as a delegate from Illinois.

The House reiterated its serious concern with respect to the Blue Cross Association's request for government funds for its research project on group practice.

Criteria for the evaluation of medical programs of national voluntary health agencies were adopted.

Three resolutions, referred to the Board, pointed out that many news stories criticizing the rising cost of health care place all or most of the responsibility squarely on physicians. As one of the resolutions put it, "Statistical reports relating to health care costs are misleading when they are referred to . . . as medical care costs; and . . . the improper labeling . . . may actually delay proper analysis of the several components."

Robert W. Lykins, M.D., Louisville, was elected November 7 to the Louisville Board of Aldermen. Doctor Lykins was declared a winner after a count and recount of votes in a very close election.



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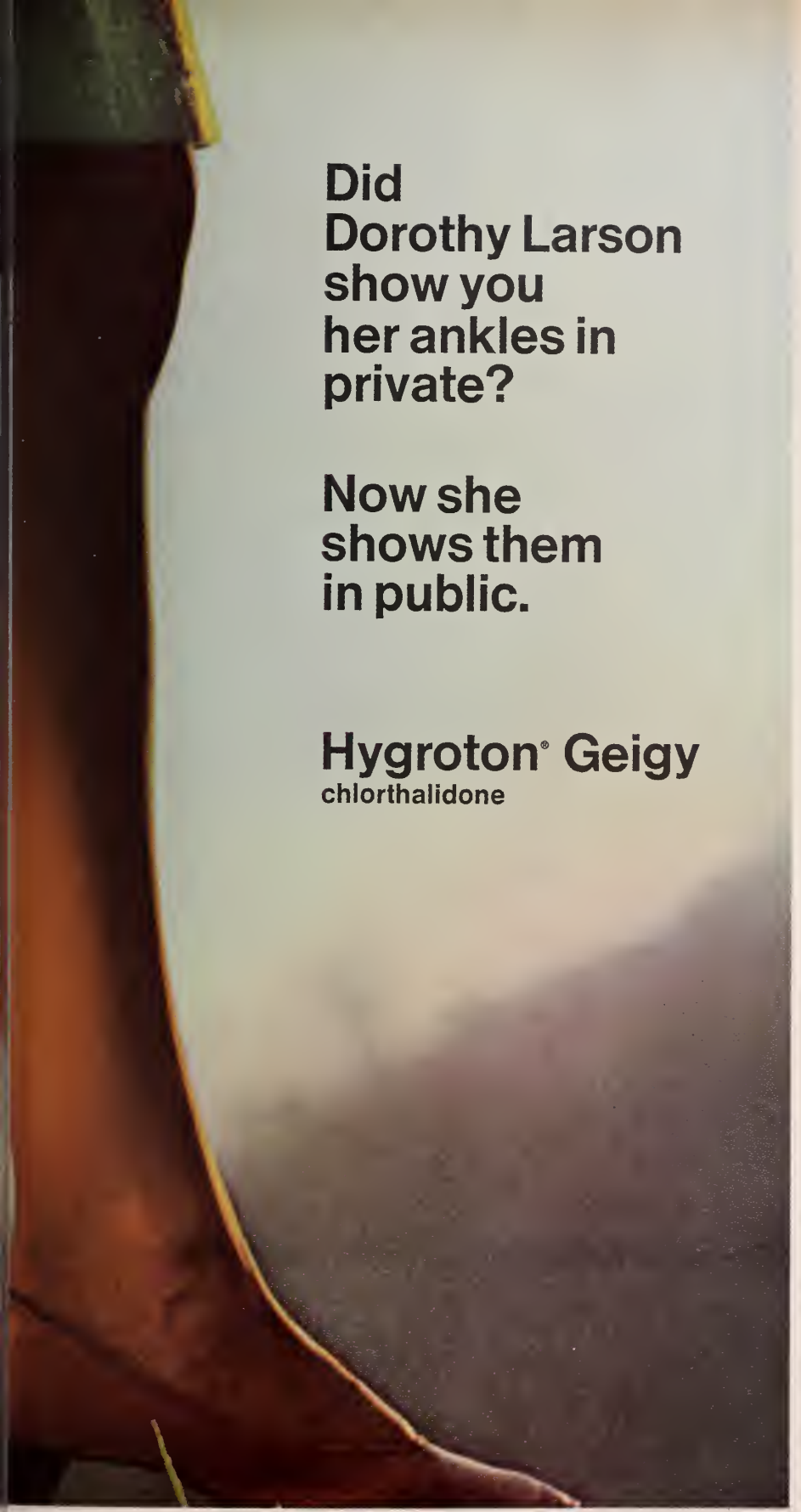
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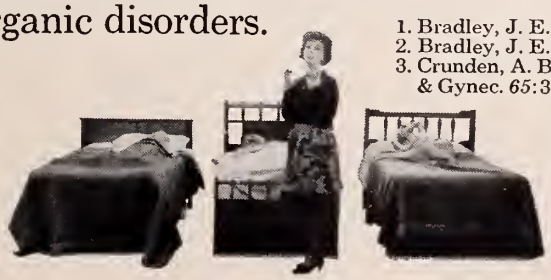
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1. Bradley, J. E., *et al.*: J. Pediat. *38*:41 (Jan.) 1951.
2. Bradley, J. E.: Mod. Med. *20*:71 (Oct. 15) 1952.
3. Crunden, A. B., Jr., and Davis, W. A.: Am. J. Obst. & Gynec. *65*:311 (Feb.) 1953.



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THE INSURANCE PAGE



Closed-Panel Group Practice

THE federal liberal establishment is hard at work on a new propaganda campaign. This time it is promoting closed-panel prepaid group practice as the "medical wave of the future", the answer to most of the problems facing the health care system of our country. The multitude of reports from health care study committees, "national conferences", presidential committees etc. all parrot the same conclusion: "Prepaid closed-panel group practice is the most efficient and least expensive method of delivering health care to the American people." Indeed, if the nation's problems in providing better health service can be remedied by more intensive study, then the golden age must surely have arrived.

Impressive claims are made for the closed-panel scheme: that it encourages earlier and more frequent diagnostic and preventive service; that it provides a practice enviroment in which the "team approach" is encouraged and high quality care is fostered by intimate professional contact; that more comprehensive care is provided through more complete coverage of physician services; that costs are more effectively controlled and hospital utilization reduced by removal of incentives for hospitalization.

Why, then, haven't the advantages of this method produced wider acceptance from the public and the profession? While prepayment and insurance have achieved phenomenal acceptance, pure group practice has grown unimpressively, and group practice combined with prepayment (i.e., closed panel groups serving a defined population, with their member physicians paid on a salary or capitation basis) has scarcely grown at all. In 1960 there were 14 major community closed-panel prepaid plans; by 1965 they had been joined by only two more. In the same five years the number of doctor-run fee-for-service medical groups showed a 250 percent increase.

The chief factor impeding the growth of these plans apparently is consumer resistance. The fact is that our sophisticated population demands personal health care, rather than the automated product of a medical supermarket. Physician recruiting has also been a major roadblock to growth, since most practitioners decline to enter into the commitments of formal group practice.

This type of group practice does, in fact, reduce the rate of hospital utilization by providing incentives not to hospitalize the patient. The group physician whose income may be depressed by a decision to hospitalize the patient —because the premium income is thereby directed to the hospital—is likely to think twice before he converts his out patient to a hospital patient. It is also likely that some plans promote greater emphasis on preventive medical care than is found in private practice.

This reduction of hospitalization and enhancement of preventive and ambulatory care are highly desirable goals for the entire profession. Indeed, voluntary health insurance would do well to emulate these groups by redirecting insurance coverage to emphasize ambulatory care rather than hospitalization.

The future of group practice may be enhanced by all the propaganda and legislative effort now being expended in its behalf, but because of its defects it appears unlikely that this type of medical organization will gain predominance in this country.

WILLIAM W. HALL, M.D.

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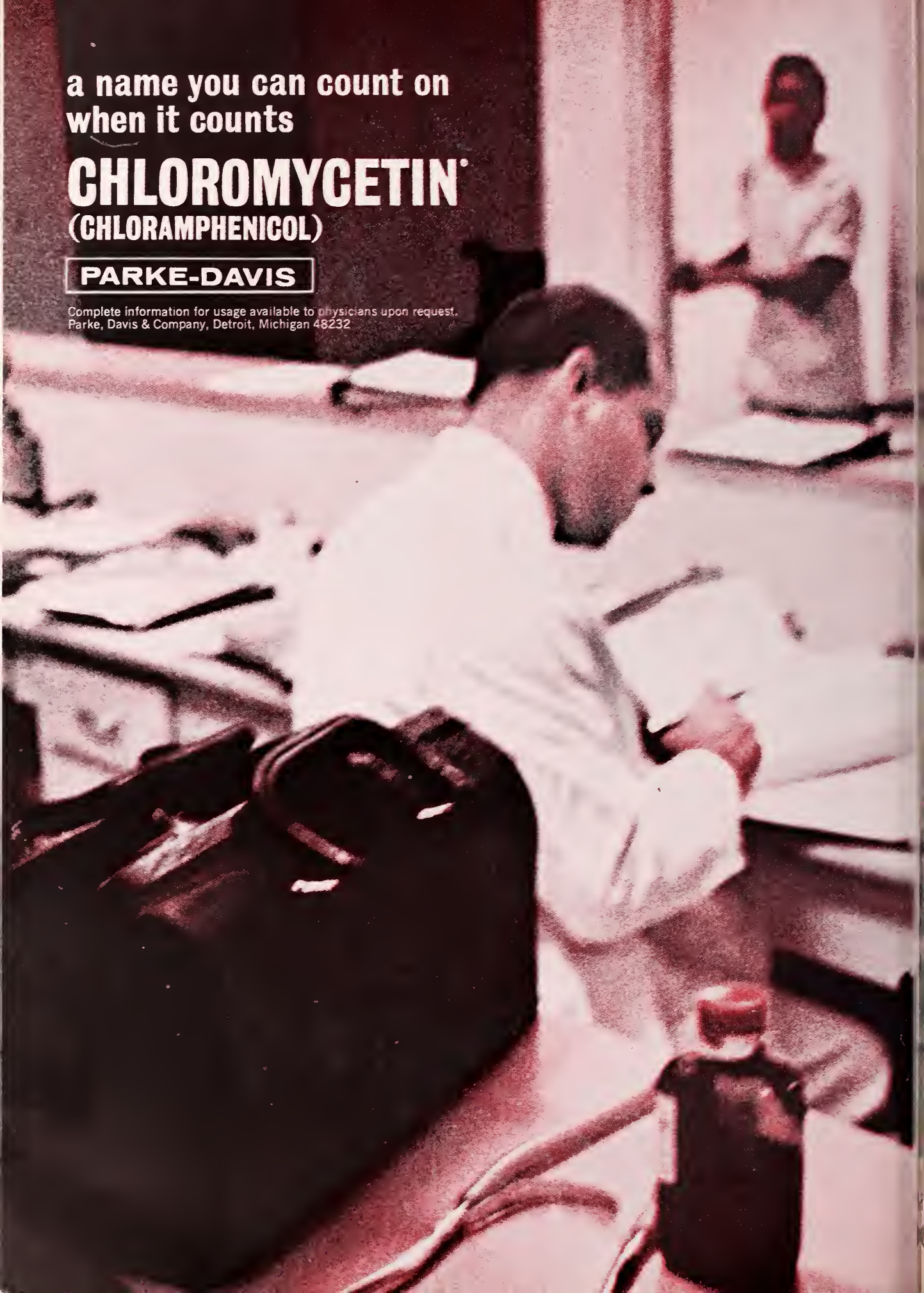
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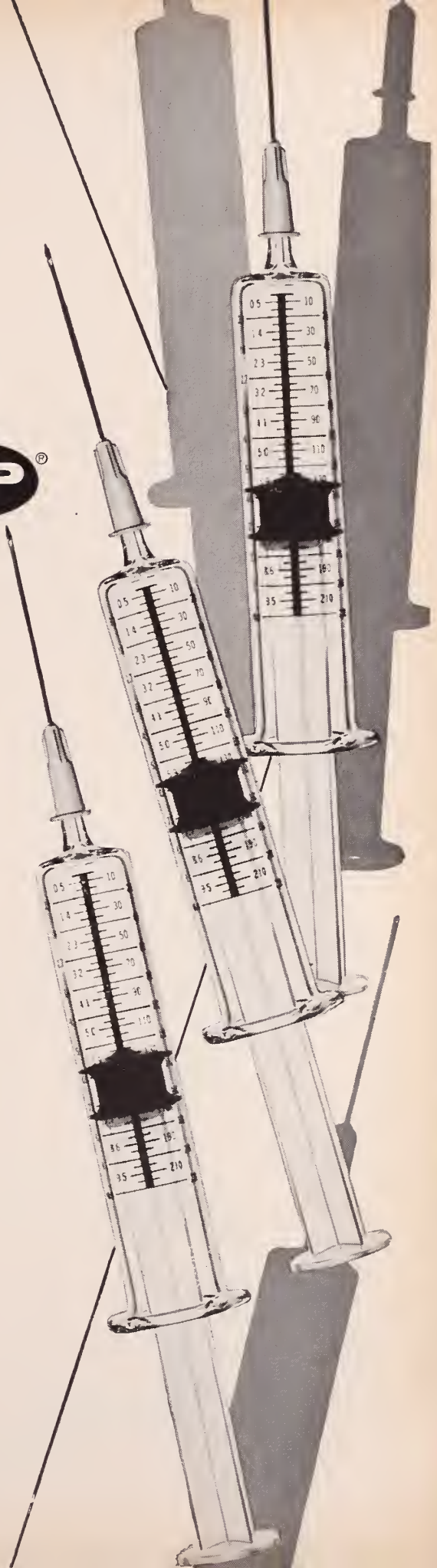

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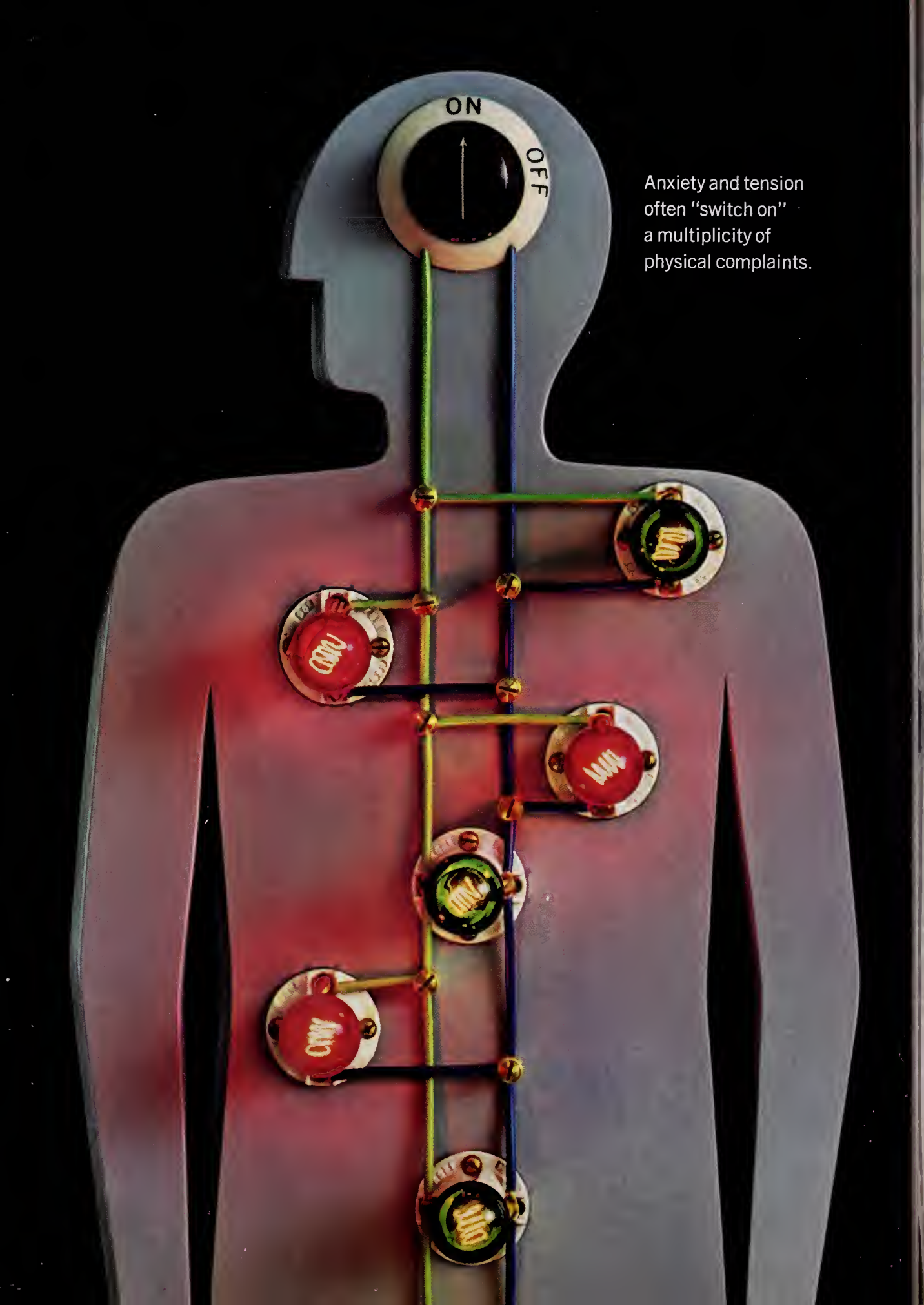
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Indications: Dimetapp is indicated for symptomatic relief of the allergic manifestations of respiratory illnesses, such as the common cold and bronchial asthma, seasonal allergies, sinusitis, rhinitis, conjunctivitis, and otitis.
Contraindications: Hypersensitivity to antihistamines. Not recommended for use during pregnancy.
Precautions: Until patient's response has been determined, he should be cautioned against engaging in operations requiring alertness. Administer with care to patients with cardiac or peripheral vascular diseases or hypertension.
Side Effects: Hypersensitivity reactions including skin rashes, urticaria, hypotension and thrombocytopenia, have been reported on rare occasions. Drowsiness, lassitude, nausea, giddiness, dryness of the mouth, mydriasis, increased irritability or excitement may be encountered.
Dosage: 1 Extentab morning and evening.
Supplied: Bottles of 100 and 500.

A.H. ROBINS COMPANY
RICHMOND, VA. 23220
A·H·ROBINS

in sinusitis, colds, U.R.I.
Dimetapp® Extentabs®
(Dimetane® [brompheniramine maleate], 12 mg.: phenylephrine HCl, 15 mg.; phenylpropanolamine HCl, 15 mg.)
up to 10-12 hours clear breathing on one tablet





Anxiety and tension often "switch on" a multiplicity of physical complaints.

a tranquilizer with particular usefulness in functional disorders

(pronounced TYE-buh-tran)

Tybatran™

brand of tybamate

Extensive clinical experience, including eleven double-blind studies,[1-11] indicates that Tybatran is an effective agent for the relief of anxiety and tension. It appears to lend itself particularly well to the management of the anxious patient who "somatizes"—whose anxiety and tension find expression in complaints such as headaches,[4,8,10,11] fatigue,[4] insomnia,[2,4,8,9,12] anorexia,[3,8,9] and pruritus.[7]

Two salient features seem to set Tybatran somewhat apart from certain other commonly used tranquilizers.

1. Tybatran often proves more effective than meprobamate and chlordiazepoxide. In one study,[4] severe anxiety responded more effectively to tybamate than to meprobamate; in another,[8] symptom-response superiority of tybamate over chlordiazepoxide was marked at statistically significant levels of confidence.

2. Tybatran appears to be less sedating than other widely used tranquilizers. Side reactions are relatively infrequent; when they do occur, they may take the form of drowsiness, although insomnia, ataxia and other adverse effects have been reported. Nevertheless, Tybatran impresses many clinicians by its comparative lack of undesirable sedative action.[3,6,12,13] (If drowsiness or vertigo is present, activities requiring optimal alertness should be avoided.)

For patients in whom anxiety is manifested in any of a multiplicity of physical complaints, Tybatran deserves a clinical trial. These are the challenging patients, those with recurrent, persistent, ever-changing symptoms for which there is no clinical or laboratory evidence of organic disease.

Usual adult dose: one or two 250 mg. capsules 3 or 4 times daily. Adjust to suit individual requirements.

A·H·ROBINS

Prescribing Information

Dosage and administration. The suggested adult dose of Tybatran (tybamate) is one or two 250 mg. capsules three or four times daily. Dosage should be adjusted to suit individual requirements. While clinical experience with Tybatran (tybamate) in children has been very limited to date, the recommended daily dosage for children 6 to 12 years old is 20 to 35 mg./kg. body weight, in three or four equally divided doses. Dosage should be adjusted to suit individual requirements. Until further clinical experience is obtained, administration of Tybatran (tybamate) to children under 6 years of age is not recommended. Daily doses larger than 3000 mg. are not recommended, although in a few instances doses in excess of this figure have been administered. Tybatran (tybamate) is also available in 350 mg. capsules, for convenience in dosage adjustment, e.g., one capsule three times daily and two at bedtime.

Contraindications. Tybatran (tybamate) should not be administered to patients known to be hypersensitive to the drug. Since no studies have been done with this drug in human pregnancy, it should not be used in pregnancy unless the potential benefit outweighs the risk.

Warnings. Simultaneous administration to psychotic patients of tybamate with phenothiazines and other central nervous system depressants has in a few instances been associated with the occurrence of grand mal or petit mal seizures. Seizures have been reported with administration of phenothiazines alone, but not with administration of tybamate alone; nevertheless, tybamate should be used cautiously in individuals who are receiving other central nervous system depressants or have a history of convulsive seizures. Also, it should be borne in mind that simultaneous administration of tybamate with alcohol or with other psychotropic agents, particularly phenothiazines or monoamine oxidase inhibitors, which are known to potentiate the action of other drugs, may result in additive actions.

Precautions. There has been no evidence to date of the development of habituation or addiction. Investigators have not observed excessive self-medication or any withdrawal symptoms with use of Tybatran (tybamate), but the latter should be kept in mind with cessation of the drug after prolonged use. Because of the occurrence of

Prescribing information continued on next page.

(pronounced TYE-buh-tran)

Tybatran™

brand of tybamate

a tranquilizer with particular usefulness in functional disorders

Prescribing information continued from preceding page.

withdrawal symptoms or exacerbation of presenting symptoms upon rapid withdrawal of other agents of this type, abrupt withdrawal of Tybatran (tybamate) should be avoided. Tybamate, like other psychotherapeutic agents, should be used with caution in addiction-prone individuals. Should symptoms of hypersensitivity occur, administration should be discontinued at once and appropriate symptomatic treatment initiated. Operation of motor vehicles or machinery or other activities requiring optimal mental alertness should be avoided if drowsiness or vertigo is present. As with any new drug, Tybatran (tybamate), should be used with caution in patients with a history of drug allergies, blood dyscrasias, and hepatic or renal disease; and prolonged and/or high doses of tybamate should be accompanied by periodic measurements of hepatic, hematopoietic, and renal function.

Adverse reactions. While these have only rarely required discontinuation of the drug, the most frequently encountered reactions have included drowsiness, dizziness, nausea, insomnia, euphoria. The drug was discontinued in one child because of a possible drug-induced urticaria, and skin rash and pruritus have been encountered in a few other patients. In a few patients, effects suggesting excessive stimulation such as hyperactivity, fidgetiness, flushing, and tachycardia have been encountered. Other reported side effects recorded only a few times to date have included ataxia, unsteadiness, confusion, feeling of unreality, "panic reaction," fatigue, headache, paresthesias, vertigo, gastrointestinal disturbances, glossitis and dry mouth. Grand mal or petit mal seizures have been reported in a few hospitalized psychotic patients to whom tybamate (up to 6000 mg. daily), phenothiazines, and other psychotropic agents were administered simultaneously. Convulsive seizures have not been reported with the use of tybamate alone.

Until clinical experience has accumulated with this drug, inasmuch as tybamate is related to meprobamate, the physician should be cautious about the possibility of rare, serious adverse reactions such as may be encountered with the latter drug. Should excessive doses of tybamate be ingested, it is recommended that any drug remaining in the stomach be removed and symptomatic therapy, including central stimulants, be used as necessary.

Supply. Tybatran (tybamate) is available in green, sealed capsules of three strengths: 350 mg., 250 mg., and 125 mg. Each strength is supplied in bottles of 100 and 500.

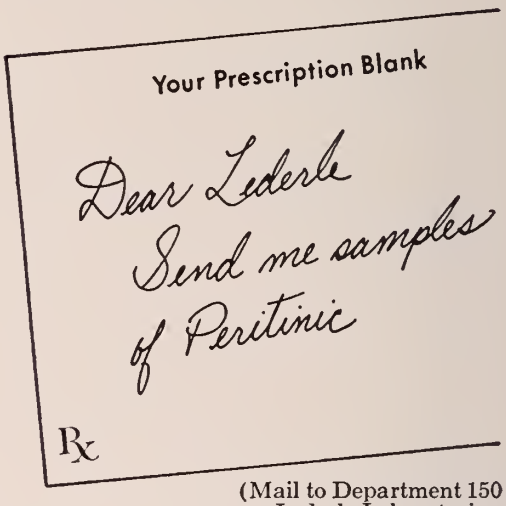
Bibliography.

1. Brick, H.: Doub, W. H., Jr., and Perdue, W. C.: Effects of tybamate on depressive and anxiety states in penitentiary inmates: a preliminary report. Int. J. Neuropsychiat. **2**:637 (Nov.-Dec.) 1966. **2.** Callis, S. B.: A new drug available for treatment of neurosis: double-blind study of tybamate. Int. J. Neuropsychiat. **2**:645 (Nov.-Dec.) 1966. **3.** Chesrow, E. J.; Kaplitz, S. E.; Sabatini, R.; Vetra, H., and Marquardt, G. H.: A new psychotherapeutic agent effective in the management of geriatric anxiety, depression and behavioral reactions. J. Amer. Geriat. Soc. **13**:449 (May) 1967. **4.** Chieffi, M.: A two-part, double-blind study of the anti-neurotic action of tybamate. Dis. Nerv. Syst. **26**:369 (June) 1965. **5.** Raab, E.; Rickels, K., and Moore, E.: A double-blind evaluation of tybamate in anxious neurotic medical clinic patients. Amer. J. Psychiat. **120**:1005 (Apr.) 1964. **6.** Seeherman, R.: Evaluation of tybamate in the clinical management of anxiety. Delaware Med. J. **36**:213 (Oct.) 1964. **7.** Shapiro, I.: Controlled study of the effects of tybamate on the neurotic component in dermatoses. Curr. Ther. Res. **8**:99 (Mar.) 1966. **8.** Splitter, S. R.: A new psychotropic drug; evaluation of tybamate in the treatment of anxiety and tension states. Psychosomatics **5**:292 (Sept.-Oct.) 1964. **9.** Stern, F. H.: A new drug (tybamate) effective in the management of chronic brain syndrome. J. Amer. Geriat. Soc. **12**:1066 (Nov.) 1964. **10.** Vazuka, F. A., and McLaughlin, B. E.: Chemotherapy of symptoms of chronic anxiety states and other neurotic disorders. Psychosomatics **6**:73 (Mar.-Apr.) 1965. **11.** Button, J. T., and Cole, W. V.: Treatment of emotional disturbances in clinic patients. J. Amer. Osteopath. Ass. **64**:812 (Apr.) 1965. **12.** Slaughter, I.: Tybamate as an antineurosis drug in the treatment of emotional disorders. J. New Drugs **5**:177 (May-June) 1965. **13.** Dunlop, E.: Tybamate—A new tranquilizer: preliminary report. Mind **2**:115 (Apr.) 1964.

A·H·ROBINS A. H. ROBINS COMPANY, RICHMOND, VA. 23220

Here's what you do to get samples of the

anticostive* hematinic



(Mail to Department 150
Lederle Laboratories,
Pearl River, New York 10965)

* anticostive, *adj.* (*anti* opposed to + *costive* causing constipation.) Against constipation. (Now isn't that a good idea in an iron-containing hematinic?)

PERITINIC®

Hematinic with Vitamins and Fecal Softener

A tablet-a-day provides:	
● Elemental Iron (as Ferrous Fumarate)	100 mg
● Dioctyl Sodium Sulfosuccinate (to counteract constipating effect of iron)	100 mg
Vitamin B_1	7.5 mg
Vitamin B_2	7.5 mg
Vitamin B_6	7.5 mg
Vitamin B_{12}	50 mcgm
Vitamin C	200 mg
Niacinamide	30 mg
Folic Acid	0.05 mg
Pantothenic Acid	15 mg

Bottles of 60

Lederle

489-7—6063



Photo professionally posed.

No injection after all!

This penicillin produces high, fast levels—orally.

Pen•Vee® K is usually so rapidly and completely absorbed that therapeutic penicillin levels are attained within 15 to 30 minutes. Thus it can often obviate the need for penicillin injections. The higher serum levels produced generally last longer than with those of oral penicillin G.

Indications: Infections susceptible to oral penicillin G: propnylaxis and treatment of streptococcal infections; treatment of pneumococcal, gonococcal, and susceptible staphylococcal infections; prophylaxis of rheumatic fever in patients with a previous history of the disease.
Contraindications: Infections caused by nonsusceptible organisms; history of penicillin sensitivity.
Warnings: Acute anaphylaxis (may prove fatal unless promptly controlled) is rare but more frequent in patients with previous penicillin sensitivity, bronchial asthma or other allergies. Resuscitative (epinephrine, aminophylline, pressor amines) and supportive (antihistamines, methylprednisolone sodium succinate) drugs should be readily available. Other rare hypersensitivity reactions include nephropathy, hemolytic anemia, leucopenia and thrombocytopenia. In suspected hypersensitivity, evaluation of renal and hematopoietic systems is recommended.
Precautions: In suspected staphylococcal infections, perform proper laboratory studies including sensitivity tests. If overgrowth of nonsusceptible organisms occurs (constant observation is essential), discontinue penicillin and take appropriate measures. Whenever allergic reactions occur, withdraw penicillin unless condition being treated is considered life threatening and amenable only to penicillin. Penicillin may delay or prevent appearance of primary syphilitic lesions. Gonorrhea patients suspected of concurrent syphilis should be tested serologically for at least 3 months. When lesions of primary syphilis are suspected, dark-field examination should precede use of penicillin. Treat beta-hemolytic streptococcal infections with full therapeutic dosage for at least 10 days to prevent rheumatic fever or glomerulonephritis. In staphylococcal infections, perform surgery as indicated.
Adverse Reactions: (Penicillin has significant index of sensitization): Skin rashes, ranging from maculopapular eruptions to exfoliative dermatitis; urticaria; serum sickness-like reactions, including chills, fever, edema, arthralgia and prostration. Severe and often fatal anaphylaxis has been reported (see "Warnings").
Composition: Tablets—125 mg. (200,000 units), 250 mg. (400,000 units), 500 mg. (800,000 units); Liquid—125 mg. (200,000 units) and 250 mg. (400,000 units) per 5 cc.

Wyeth Laboratories Philadelphia, Pa.

ORAL PEN•VEE® K

(potassium phenoxymethyl penicillin) Wyeth®

MESSAGE FROM THE PRESIDENT



The Physician and Charity

THE charitable claim of the destitute upon physicians undoubtedly originated with the pre-historic priest-medicine man. It is explicit and well-documented in early Egypt, and continued through the Aesclepian brotherhood to become firmly established in our Judeo-Christian culture. Both the American and Kentucky Medical Associations have affirmed it repeatedly.

Modern physicians discharge this obligation in various ways—through attendance on service or house patients in hospitals, in clinics, or in their individual practices. In areas with poorly-developed social services, including much of rural Kentucky, the physician routinely has treated the sick according to their needs and been rewarded according to their means.

In adopting Title XVIII and Title XIX amendments to the Social Security Act, the Congress declared, as national policy, that certain classes of the population should have medical care, in whole or in part, at the expense of the public treasury. These classes are not limited to the destitute, although some of the destitute are included.

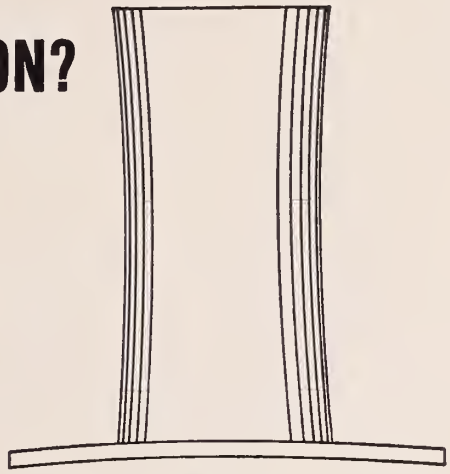
It is widely known that all official medical organizations and most physicians opposed this policy, even though it provided that the physician should be paid his usual customary and reasonable fee for his services, in recognition of another traditional principal—that the workman is worthy of his hire.

Philosophically, the guarantee of medical service to the Title XVIII and Title XIX groups was a political decision, in no sense underwritten by physicians, individually or collectively. If the public treasury is inadequate to deliver the services promised, the physician may look elsewhere for payment—to the patient, his family or third parties—limited only by his humanitarian obligation to the destitute.

The enactment of Medicare did not repeal charity in the practice or heart of the physician. We will not let the needy suffer.

George F. Brockman

OPTICAL ILLUSION?



Height and width of this hat are equal, but the unbroken height of the crown appears greater than the interrupted width of the brim. Don't play games with your eyes. Some glasses are poorly crafted. Rely on Southern Optical accuracy.

Charge accounts invited

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Togetherness....

...can be rough when epidemics of nausea and vomiting strike a family. Emetrol offers prompt, safe relief. It is free from toxicity[1] or side effects[2,3] and will not mask symptoms of serious organic disorders.

1. Bradley, J. E., *et al.*: J. Pediat. *38*:41 (Jan.) 1951.
2. Bradley, J. E.: Mod. Med. *20*:71 (Oct. 15) 1952.
3. Crunden, A. B., Jr., and Davis, W. A.: Am. J. Obst. & Gynec. *65*:311 (Feb.) 1953.



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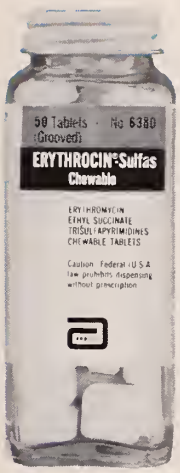
WILLIAM H. RORER, INC.
Fort Washington, Pa.

Emetrol®
phosphorated carbohydrate solution
emesis control



Perhaps there have been times when you wanted to prescribe erythromycin and triple sulfas for little patients. Now you can—with a choice of two new fine-tasting pediatric forms.

New—Two Pediatric Forms of Erythromycin and Triple Sulfas





ERYTHROCIN®-SULFAS Chewable (Erythromycin ethyl succinate-trisulfapyrimidines chewable tablet)

In clinical trials[1,2], this orange-flavored tablet was given to 55 patients, aged four months to 18 years.

Diagnoses (multiple in some cases) represented a cross section of bacterial infections commonly seen in pediatric office practice.

Therapy was given from three to 12 days, with an average of six days.

Of the 55 patients, 30 were reported cured within 72 hours, while 22 showed partial recovery within the same time, and subsequent clinical cure.

A clinical cure rate of 94.5%

ERYTHROCIN®-SULFAS Granules (Erythromycin ethyl succinate-trisulfapyrimidines granules for oral suspension)

87 patients were treated[1,2]—all children, ages four months to 15 years.

The diagnoses were multiple in some cases and were chiefly bacterial infections of the respiratory tract.

Dosage was maintained from three to 10 days; average treatment was five days. All of the ill children accepted the orange-flavored suspension favorably.

53 were clinically cured within 72 hours, while 32 showed partial relief within the same time, and subsequent clinical cure.

701358

A clinical cure rate of 97.7%

1. Case Reports on File, Dept. Clin. Development, Abbott Laboratories.
2. Polley, R.F.L., Use of Erythromycin-Sulfas in Office Practice, Western Med., 7:177, July, 1966.

ABBOTT

Brief Summary on next page

ERYTHROCIN®-SULFAS
Brief Summary

Contraindications: Known sensitivity to erythromycin or sulfonamides. Because of the possibility of kernicterus with sulfonamides, do not use in pregnancy at term, premature or newborn infants.

Warnings: As with other forms of sulfonamide therapy, carefully evaluate patients with liver or kidney damage, urinary obstruction, or blood dyscrasia. Deaths have been reported from hypersensitivity reactions and blood dyscrasias following use of sulfonamides. Perform blood counts and liver and kidney function tests if used repeatedly at close intervals or for long periods.

Precautions, Side Effects: Occasionally mild abdominal discomfort, nausea or vomiting may occur with erythromycin, generally controlled by reduction of dosage. Mild allergic reactions (such as urticaria and other skin rashes) may occur. Serious allergic reactions have been extremely infrequent. Use sulfonamides with caution in patients with a history of allergy. Assure adequate fluid intake to prevent crystalluria and institute alkali therapy if indicated. If overgrowth of nonsusceptible organisms occurs, withdraw the drug and institute appropriate treatment. If a patient should show signs of hypersensitivity, appropriate countermeasures (e.g. epinephrine, steriods, etc.) should be administered and the drug withdrawn.

Adverse Reactions: Sulfonamide therapy may be associated with headache, nausea, vomiting, urticaria, diarrhea, hepatitis, pancreatitis, blood dyscrasias, neuropathy, drug fever, skin rash, injection of the conjunctiva and sclera, petechiae, purpura, hematuria and crystalluria.

Side effects due to erythromycin are infrequent, but occasional abdominal discomfort, nausea, or vomiting, urticaria and other skin rashes may occur.

Supplied: The Granules for Oral Suspension come in bottles of 60 ml. and 150 ml. The Chewable tablets are in bottles of 50. Each 5-ml. teaspoonful of reconstituted Granules or each Chewable tablet provides erythromycin ethyl succinate equivalent to 125 mg. of erythromycin activity and 167 mg. of each of sulfadiazine, sulfamerazine and sulfamethazine.

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701358

To fight TB- find it first!

Make tuberculin testing routine with every physical examination.

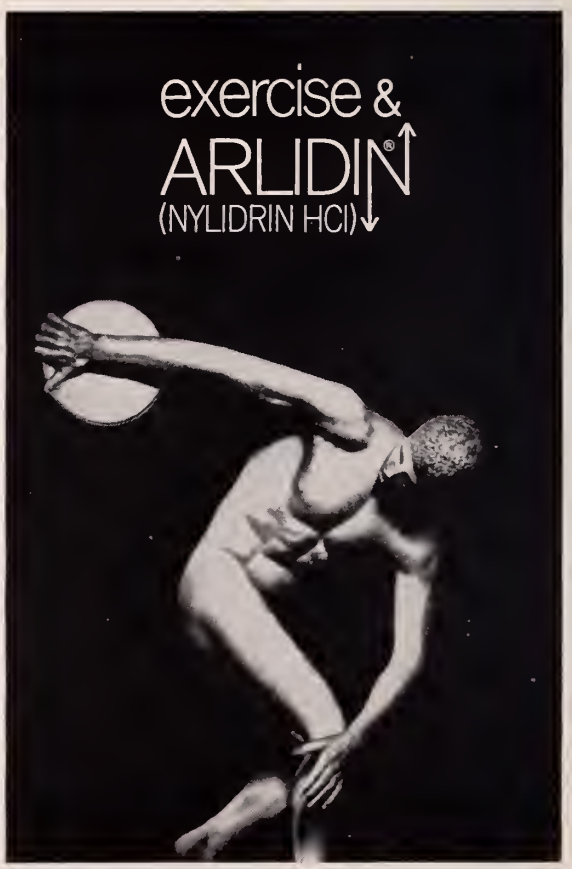


TUBERCULIN,TINE TEST
(Rosenthal)

Side effects are possible but rare: vesiculation, ulceration, or necrosis at test site. Contraindications: none, but use with caution in active tuberculosis. Available in 5's and 25's.

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Don't let monilia cut broad-spectrum therapy short...

start with Tetrex-F®

tetracycline phosphate complex-nystatin

Use of broad-spectrum antibiotics can cause fungal overgrowth in the alimentary tract... and give rise to symptoms so troublesome that therapy must be prematurely stopped. Tetrex-F (tetracycline phosphate complex-nystatin) helps you circumvent this problem.

The nystatin can prevent overgrowth of monilia; the phosphate complex delivers tetracycline to the blood rapidly. Side effects are infrequent.

High-Risk Patients

Tetrex-F (tetracycline phosphate complex-nystatin) is especially useful in patients most susceptible to fungal overgrowth during tetracycline therapy: (1) the elderly or debilitated, (2) young children, (3) the diabetic, (4) those on long-term tetracycline therapy, (5) those on steroid therapy, (6) those who have had moniliasis before, and (7) pregnant patients with a history of monilial vaginitis.

When you start with economical Tetrex-F (tetracycline phosphate complex-nystatin), you can complete the full course of broad-spectrum therapy with less chance of losing control elsewhere. A good start for a healthy finish.

PRESCRIBING INFORMATION. For complete information consult Official Package Circular. *Indications:* Infections of respiratory, gastrointestinal and genitourinary tracts and skin and soft tissues due to tetracycline-sensitive organisms, in patients with increased susceptibility to monilial infections. *Contraindications:* The drug is contraindicated in patients hypersensitive to its components. *Warnings:* Photodynamic reactions have been produced by tetracyclines. Natural and artificial sunlight should be avoided during therapy. Stop treatment if skin discomfort occurs. With renal impairment, systemic accumulation and hepatotoxicity may occur. In this situation, lower doses should be used. Tooth staining and enamel hypoplasia may be induced during tooth development (last trimester of pregnancy, neonatal period and childhood). *Precautions:* Bacterial superinfections may occur. Infants may develop increased intracranial pressure with bulging fontanels. In gonorrheal therapy, serologic tests for syphilis should be conducted initially and monthly for 3 months. *Adverse Reactions:* Glossitis, stomatitis, nausea, diarrhea, flatulence, proctitis, vaginitis, dermatitis, and allergic reactions may occur. *Usual Adult Dosage:* 1 capsule q.i.d. Continue for 10 days in Beta-hemolytic streptococcal infections. Administer one hour before or two hours after meals. *Supplied:* Capsules, bottles of 16 and 100. Each capsule contains tetracycline phosphate complex equivalent to 250 mg. tetracycline HCl activity and 250,000 units of nystatin. For Oral Suspension, 125 mg. tetracycline and 125,000 u. nystatin/5 ml., 60 ml. bottles.

BRISTOL

BRISTOL LABORATORIES
Division of Bristol-Myers Company
Syracuse, New York 13201



ANSWERS TO YOUR QUESTIONS ABOUT BLUE SHIELD

Q. What are the chief advantages of the Blue Shield, Blue Cross and Major Medical Program for Kentucky Physicians and their employes?

A. (1) Broader coverage than Blue Shield and Blue Cross can offer on a direct pay or small group basis.

(2) An individual physician may enroll or obtain for himself and one or more employes health care coverage equivalent to plans purchased by business and industrial groups for their employes.

(3) Monthly billings are sent to your office for payroll deductions and payment is made to Blue Shield and Blue Cross.

* *(See advertisement on opposite page for other advantages.)*

Q. My partner and I have three employes. Is it necessary for us to subscribe to the entire Blue Shield, Blue Cross and Major Medical Program?

A. Yes, if you desire the same level of benefits offered in this special package program. However, if regular enrollment requirements can be met you may form your own group and choose any level of benefits for which you are eligible.

Q. I have a Blue Shield and Blue Cross Group in my office which includes four of my employees. Can we also enroll in your Major Medical Plan?

A. Yes. Each of the members of your present group need only adjust his present, basic Blue Shield and Blue Cross Plans to the level of benefits described in our ad on the opposite page of this issue. Then the Major Medical Plan may be added.

Q. What is the dollar maximum for each Benefit Period under the Major Medical Plan?

A. A maximum of $10,000 for each Benefit Period with a total of $20,000 for all Benefit Periods.

Q. What is a Benefit Period?

A. A Benefit Period is the length of time during which Major Medical Benefits are provided. It begins on the first day of care by a physician and ends whenever the member has no covered medical expense for 90 consecutive days OR 12 months from the first day of the Benefit Period, whichever occurs first.

Q. May I pay my dues annually, if I enroll in the Blue Shield and Blue Cross special Health Care Program for Kentucky Physicians and their employes?

A. No. All who enroll are required to pay dues monthly because a special group rate has been guaranteed from 11-1-67 to 11-1-68. Monthly billings also facilitate the addition and deletion of members as required.

Q. How should I go about enrolling in the Blue Shield, Blue Cross and Major Medical Program for Kentucky Physicians and their employes?

A. Personal service can be obtained by contacting the Blue Cross and Blue Shield office nearest you: Ashland, Bowling Green, Covington, Frankfort, Hazard, Lexington, Louisville, Owensboro, Paducah, Pikeville, Pineville and Somerset.

DOCTOR . . .

It's Time for A Check-Up!

Do You and Your Employees Have Adequate Health Care Protection?



Kentucky Blue Shield and Blue Cross offer you and your office employees an opportunity to obtain BROADER HEALTH CARE PROTECTION . . . .

- Irrespective of health conditions
- At monthly group rates
- Regardless of the number you employ
- In One Complete Package . . .

1. **Blue Shield SCHEDULES "C" or "D" for surgical-medical services:**

Schedule "C"—surgical allowances up to $270.

Schedule "D"—surgical allowances up to $405.

(These Blue Shield Schedules also provide allowances for In-Hospital Medical, X-Ray and Anesthesia Services.)

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$100 Deductible

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$20,000 Maximum

If you are a physician practicing in Kentucky, age 64 or under, you and your employees are eligible for this Special Group Program.

Persons 65 or older may apply for the Blue Shield & Blue Cross-65 Plan.

For more information, CONTACT our office nearest you.

(See opposite page for office locations)

BLUE CROSS® and BLUE SHIELD®

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Nothing else I've tried seems to work, so I decided to give you a crack at it.

Some U.R.I. patients are more miserable than others.

That's why we make Novahistine® tablets in two different formulations.

And let you control the dosage.

With Novahistine LP tablets and Novahistine Singlet tablets you have the range and flexibility of decongestant dosage that lets you prescribe for the needs of the individual patient.

Novahistine LP tablets are most useful for relief of nasal congestion in patients without pain or fever.

Novahistine Singlet tablets, which provide analgesic-antipyretic effect, as well as decongestant action, are indicated for upper respiratory infections accompanied by pain, aches and fever.

Whether you prescribe Novahistine LP or Novahistine Singlet, a total daily dose of 3 or 4 tablets will usually provide effective, continuous relief.

Use cautiously in patients with severe hypertension, diabetes mellitus, hyperthyroidism or urinary retention. Caution ambulatory patients that drowsiness may result.

Each Novahistine LP tablet contains phenylephrine hydrochloride, 25 mg.; and chlorpheniramine maleate, 4 mg.

Each Novahistine Singlet tablet contains phenylephrine hydrochloride, 40 mg.; chlorpheniramine maleate, 8 mg.; and acetaminophen, 500 mg



DOW PITMAN-MOORE DIVISION OF THE DOW CHEMICAL COMPANY, INDIANAPOLIS

IN THE BOOKS

MANUAL OF PREOPERATIVE AND POSTOPERATIVE CARE: by Henry T. Randall, M.D.; Published by W. B. Saunders Company, Philadelphia and Landan, 1967; 506 Pages; Price $8.50.

This book has been prepared by the Committee on Pre- and Postoperative Care of the American College of Surgeons. It is an extension of the course offered at the annual meeting of the American College of Surgeons.

The purpose of the manual is to describe modern methods of preoperative evaluation and postoperative management of patients undergoing elective and emergency surgery. It provides a good reference of the recent advances in surgical metabolism and nutrition. It does not pretend to be a text. Extensive details of management are not available but good references to texts and articles for further information are included at the end of most chapters.

The book has multiple authors. The editors have made a considerable effort to avoid the boring repetitive material that plagues many books of this type. Some repetition does exist but, in general, it relates to difference in point of view. Extensive cross references are used to prevent the restating of basic principles. This is certainly one of the book's strongest points.

The book is divided into two sections. Part I deals with general principles of preoperative and postoperative care. It discusses the preoperative evaluation and preparation of patients as well as fluid and electrolyte problems, metabolic problems, hemorrhage and respiratory problems. In addition some time is devoted to a discussion of recovery room and intensive care management. Part II considers patient care in the surgery of the various body organs and systems.

The chapter on Fluid and Electrolyte Therapy by Henry T. Randall, M.D., and the chapter on Thyroid and Parathyroid surgery by Oliver Cope, M.D., are particularly well written.

In summary, I believe this book is a worthwhile contribution and should be a valuable addition to the library of both the practicing surgeon and the surgical resident.

E. Dean Canan, M.D.

DIABETES MELLITUS: Diagnosis and Treatment, (Vol. 2, edited by George J. Hamwi, M.D., and T. S. Danowski, M.D.; Published by American Diabetes Assaciatian, Inc., New York, 1967; 250 Pages; Price, $2.50.

This book is prepared under the auspices of the Committee on Professional Education of the American Diabetes Association and is to supplement the first volume, which was published in 1964.

The contributors, 47 in all, are well selected. Each has donated his efforts to the American Diabetes Association and this undoubtedly is responsible for the extremely low price of the book.

The chapters are grouped under the broad headings of introduction, diagnosis, therapy, emergencies, problems and management, and long-term problems. There is also a chapter on special problems with infants and children and a chapter on hypoglycemia.

Some of the chapters are so condensed that they appear almost in outline form. This does not enhance the readability of the book, but there is an excellent list of references with each chapter. The book obviously is not designed to be a comprehensive reference work on diabetes. As stated in the foreword, it is an effort to provide practical, concise and up-to-date information to a greater number of physicians. This it does admirably and at a bargain price.

Stuart Graves, Jr., M.D.

ROENTGENOLOGIC DIAGNOSIS—A Complement in Radiology ta the Beesan and McDermatt TEXTBOOK OF MEDICINE, Vals. I and II: by J. Geargе Teplick, M.D., Marvin E. Haskin, M.D., and Arnd P. Schimert, M.D.: Published by W. B. Saunders Campany, Philadelphia and Landon, 1967; 1240 Pages; Price, $38 set.

This new atlas and textbook is unusual and represents a novel departure from the customary treatment of diagnostic radiology. It is organized by the disease entities rather than grouped under various syndromic classifications of radiographic appearance.

Brief discussions accompanying the illustrations concisely summarize the characteristic radiographic manifestations. These discussions follow the same organizational format as the Beeson and McDermott *Textbook of Medicine*.

The authors provide representative series of films showing the radiologic appearance of nearly 800 diseases. Its 2000 illustrations represent a collection from worldwide sources. The illustrations are of good quality. Objective markers are freely used on the films to pinpoint abnormal radiologic changes which might be puzzling to the non-radiologists. The bibliography is quite adequate.

Even though the main purpose of this text is to allow the clinician ready access to the radiologic features of any disease with which he is concerned, the reader must keep in mind the limitation of radiologic interpretation of many disease entities. Without basic experience in normal roentgen anatomy and fundamental knowledge of roentgen interpretation, the value of this text is rather limited for the practicing clinician.

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...soothes colicky pain with paregoric*
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Whether it's a 24-hour "bug", a food problem, or simply nervousness and anxiety, Parepectolin will bring the diarrhea under control until etiology can be determined. In some cases, Parepectolin may be all the therapy necessary.

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Contains opium (¼ grain) 15 mg. per fluid ounce.
warning: may be habit forming
Pectin ..... (2½ grains) 162 mg.
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1968 Annual Meeting — Kentucky Medical Association

Convention Center — **Louisville, Kentucky** — **September 24, 25, 26**

Fill Out and Mail to:

T. R. MARSHALL, M.D., Chairman

Committee on Scientific Exhibits

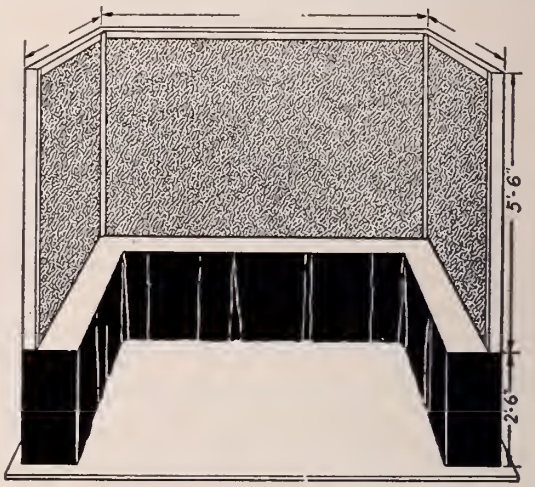
Kentucky Medical Association

3532 Janet Avenue

Louisville, Kentucky 40205

Applications for space should be received before July 1, 1968

Dimensions and structure of KMA Scientific booth are shown in accompanying illustration



1. Title of Exhibit: .....
2. Name (s) of Exhibitor (s): (AMA Member?) .....

   Institution (if desired): .....

   Mailing Address .....
3. Do you have a built-in exhibit? .....
4. Description of Exhibit: (Attach Brief Description Not To Exceed 50 Words to this blank)
5. Exhibit will consist of the following: (Check which)

   Charts and Posters.... Photographs.... Drawings.... X-rays....

   Specimens.... Moulages.... Other Material..... (Describe)
6. Booth Requirements:

   Amount of total wall space needed? .....

   Back wall ..... Side walls (All side walls are 4') .....

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7. Indicate sources of assistance provided in connection with the exhibit. .....
8. Has this exhibit been exhibited before? If so, when & where? .....

Date ....

Signature of Applicant

The Mead Johnson Aesculapius Award of $200.00 and identifying plaque will be presented by the KMA for the best exhibit in 1968.

The Kentucky Medical Association will provide without cost to the exhibitor the following: Exhibit space, shelves, sign for booth, current, bracket lights, provided all items are approved in advance by the committee.

Cost of transporting exhibits to the meeting must be borne by the individual exhibitor as well as costs of cards, signs, etc., which are a part of the exhibit.

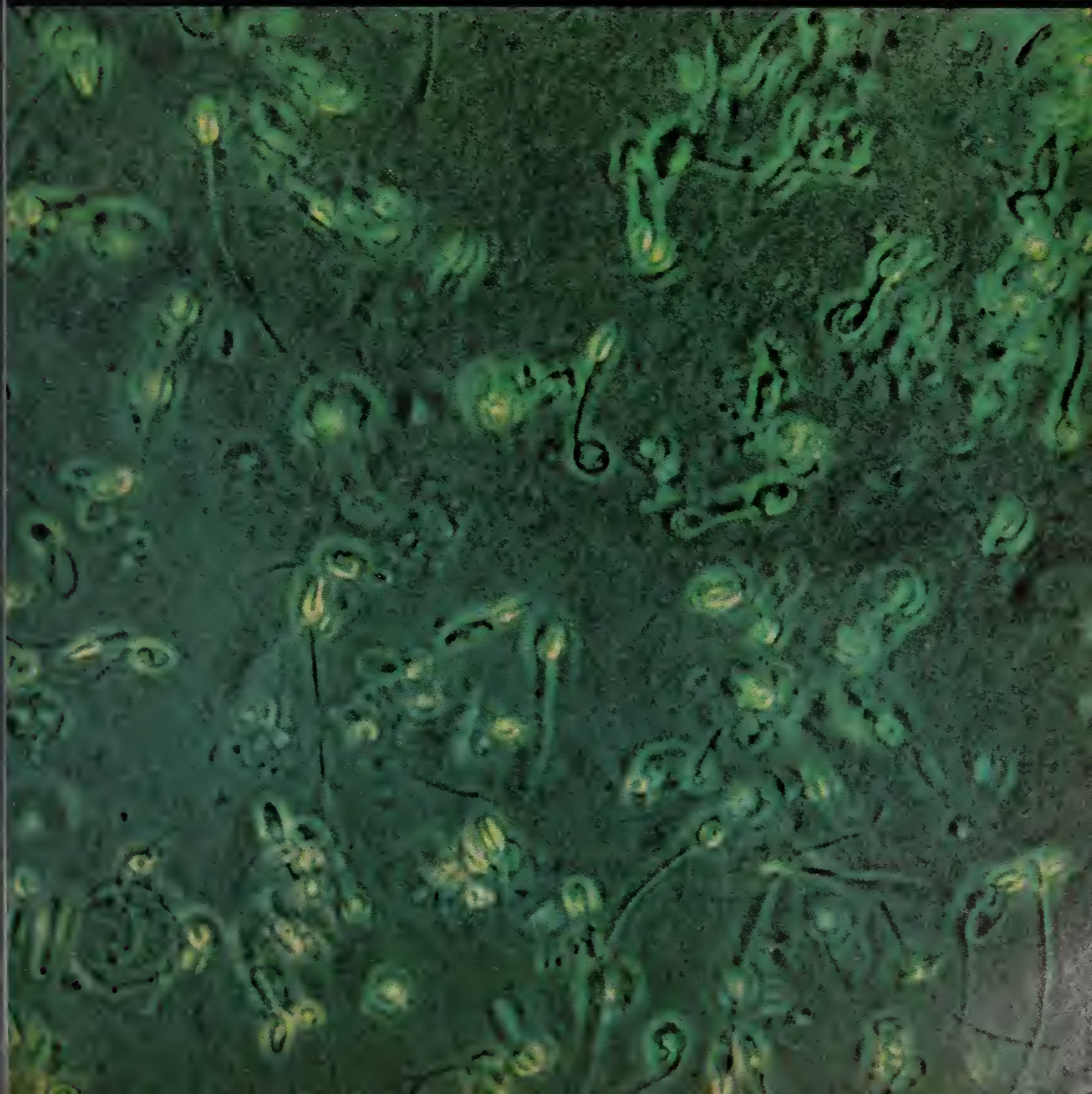
View boxes, furniture, decorations, etc., may be rented, if desired, by applying directly to Jos. T. Griffin Company, 704 West Main Street, Louisville 2, who supply equipment for the annual KMA meeting.

Due to the shortage of space, please have you exhibit as compact as possible.

When the talk turns to oral contraceptives, it makes medical sense to remember low-dose Norinyl®-1.

(norethindrone 1mg. c mestranol 0.05mg.)

Turn page for contraindications, precautions and side effects.



Reduction of oral contraceptive dosage to the lowest effective levels is a well-accepted principle of conservative medical practice. In keeping with this view, Norinyl is now also available as Norinyl-1, containing exactly one half the previous dosage of norethindrone and mestranol. Clinical experience has established that effective fertility control can be achieved with the same degree of reliability and safety with new Norinyl-1 when taken as directed.

What about switching patients from higher dosage forms?

In transferring patients to low-dose Norinyl-1 from higher-dosage oral contraceptives, some breakthrough bleeding may occur in the early cycles. In the majority of cases the bleeding episode is mild and self-limited. The long-term advantages of the lower dosage form should be weighed against the inconvenience of possible breakthrough bleeding in the individual patient.

Contraindications: 1. Patients with thrombophlebitis or with a history of thrombophlebitis or pulmonary embolism. 2. Liver dysfunction or disease. 3. Patients with known or suspected carcinoma of the breast or genital organs. 4. Undiagnosed vaginal bleeding.

Warnings: 1. Discontinue medication pending examination if there is sudden partial or complete loss of vision or if there is a sudden onset of proptosis, diplopia or migraine. If examination reveals papilledema or retinal vascular lesions, medication should be withdrawn. 2. Since the safety of NORINYL-1 (norethindrone 1 mg. with mestranol 0.05 mg.) in pregnancy has not been demonstrated, it is recommended that for any patient who has missed two consecutive periods, pregnancy should be ruled out before continuing the contraceptive regimen. If the patient has not adhered to the prescribed schedule, the possibility of pregnancy should be considered at the time of the first missed period. 3. Detectable amounts of the active ingredients in oral contraceptives have been identified in the milk of mothers receiving these drugs. The significance of this dose to the infant has not been determined.

Precautions: 1. The pretreatment physical examination should include special reference to breast and pelvic organs, as well as a Papanicolaou smear. 2. Endocrine and possibly liver function tests may be affected by treatment with NORINYL-1. Therefore, if such tests are abnormal in a patient taking NORINYL-1 it is recommended that they be repeated after the drug has been withdrawn for two months. 3. Under the influence of estrogen-progestogen preparations, preexisting uterine fibromyomata may increase in size. 4. Because these agents may cause some degree of fluid retention, conditions that may be influenced by this factor, such as epilepsy, migraine, asthma, cardiac or renal dysfunction, require careful observation. 5. NORINYL-1 should be used with caution in patients with a history of cerebrovascular accident. 6. In relation to breakthrough bleeding, and as in all cases of irregular bleeding *per vaginam*, nonfunctional causes should be borne in mind. In cases of undiagnosed vaginal bleeding, adequate diagnostic measures are indicated. 7. Patients with a history of psychic depression should be carefully observed and the drug discontinued if the depression recurs to a serious degree. 8. Any possible influence of prolonged NORINYL-1 therapy on pituitary, ovarian, adrenal, hepatic or uterine function awaits further study. 9. A decrease in glucose tolerance has been observed in a small percentage of patients on oral contraceptives. The mechanism of this decrease is obscure. For this reason, diabetic patients should be carefully observed while receiving NORINYL-1 therapy. 10. Because of the occasional occurrence of thrombophlebitis and pulmonary embolism in patients taking oral contraceptives, the physician should be alert to the earliest manifestations of the disease. 11. Because of the effects of estrogens on epiphyseal closure, NORINYL-1 should be used judiciously in young patients in whom bone growth is not complete. 12. The age of the patient constitutes no absolute limiting factor, although treatment with NORINYL-1 may mask the onset of the climacteric. 13. The pathologist should be advised of NORINYL-1 therapy when relevant specimens are submitted.

Side effects observed in patients receiving oral contraceptives: The following adverse reactions have been observed in patients receiving oral contraceptives: nausea, vomiting, gastrointestinal symptoms (such as abdominal cramps and bloating), breakthrough bleeding, spotting, change in menstrual flow, amenorrhea, edema, chloasma or melasma, breast changes (tenderness, enlargement and secretion), change in wei (increase or decrease), changes in cervical erosion and cervical secretio suppression of lactation when given immediately postpartum, cholestatic jaundice, migraine, rash (allergic), rise in blood pressure in susceptibl individuals, mental depression.

Although the following side effects have been reported in users of oral contraceptives, no cause and effect relationship has been established: anovulation post-treatment, premenstrual-like syndrome, chang in libido, changes in appetite, cystiti like syndrome, headache, nervousn dizziness, fatigue, backache, hirsutism, loss of scalp hair, erythema multiforme, erythema no sum, hemorrhagic eruption, itchin

The following occurrences have bee observed in users of oral contracep tives (a cause and effect relationshi has been neither established nor di proved): thrombophlebitis, pulmon embolism, neuro-ocular lesions.

The following laboratory results may be altered by the use of oral contraceptives: increased sulfobromophthalein and other hepatic function tests, coagulation tests (increase in prothrombin, Factors VII, VIII, IX and X), thyroid function (increase in PBI and butanol extractable protein-bound iodine a decrease in T^3 values), metyrapone test, pregnanediol determination.

norethindrone — an original steroid from
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LABORATORIES INC., PALO ALTO, CALIF.

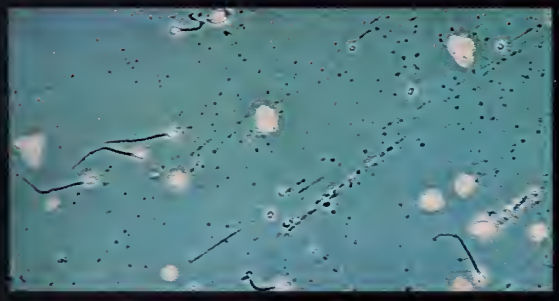
Here's why Norinyl-1 makes medical sense.

The effectiveness of Norinyl-1 as a low-dose oral contraceptive may be explained by its possible multiple action. In addition to its primary action of suppression of ovulation, Norinyl-1 may offer additional protective mechanisms... (1) creation of a cervical mucus that may be hostile to sperm penetration, and (2) development of an endometrium that may be out of phase with nidation. These effects are illustrated below.

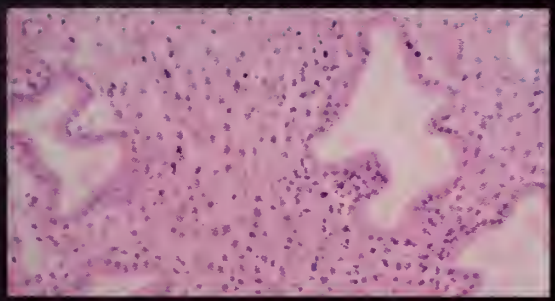
Untreated Patient



Cervical mucus at midcycle is usually thin and watery, with Spinnbarkeit (stretchability) of 15 to 20 cm.



Spermatozoa appear healthy, active, freemoving.

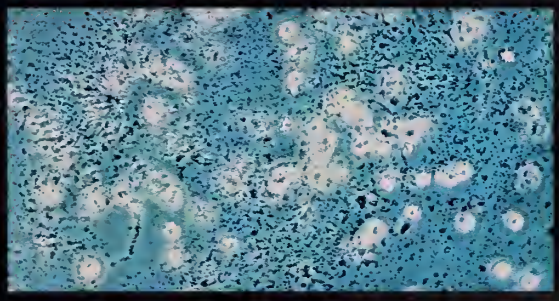


Endometrium of untreated patient is receptive to the fertilized ovum during secretory phase.

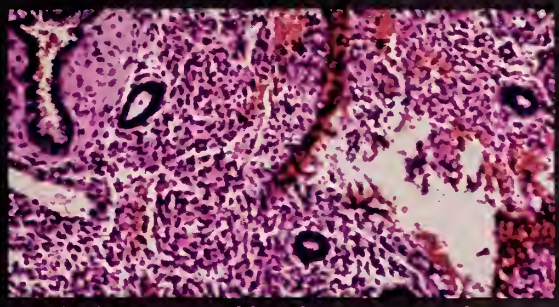
Norinyl-1 Patient



Cervical mucus at midcycle is scanty, viscous—with Spinnbarkeit of 1 cm. or less.



Immobile spermatozoa as they appear in cervical mucus taken from patient treated with Norinyl-1.



Norethindrone in Norinyl-1 accelerates secretory phase, suppresses glandular and vascular development.

Norinyl®-1 tablets
(norethindrone 1mg. & mestranol 0.05mg.)

- new low dose of time-proved ingredients
- established norethindrone/mestranol ratio
- lower patient cost

An uncommon steroid for common inflammatory dermatoses

In everyday topical steroid therapy, Synalar produces rapid resolution of inflammation and itching in steroid-responsive dermatoses—and at relatively low cost to the patient.

Advanced molecular design enhances potency

Synalar combines the advantage of earlier corticosteroid compounds with unique structural innovations. As a result, preparations of Synalar 0.01% and Synalar 0.025% have been reported to be more potent topically and significantly more effective than hydrocortisone 1.0%. The unique fluocinolone acetonide molecule provides one of the most useful topical corticosteroids for everyday practice.

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The clinical efficacy of Synalar has been extensively documented in the world literature. Commonly encountered diseases such as allergic and contact dermatitis, eczematous and seborrheic dermatitis, and neurodermatitis respond rapidly to Synalar, often where previous therapy with other topical corticosteroids has failed.

Low patient cost for wider usefulness

With Synalar, a high degree of efficacy does not mean high price. And—a small quantity goes a long way. Thus, your patients can often obtain the "economy" of a hydrocortisone preparation with the proved efficacy of a potent, truly advanced steroid.

Synalar®
fluocinolone acetonide





Turn page for contraindications, precautions and side effects.

For everyday topical steroid therapy

Synalar® 0.01%

fluocinolone acetonide provides economy in two practical dosage forms

For general use, the most economical and widely applicable concentration of Synalar is 0.01% Cream in a water-washable, vanishing cream base. Synalar Solution 0.01% is especially valuable in dermatoses involving moist, intertriginous areas or hairy sites where creams and ointments do not spread or penetrate readily. Synalar Solution is a unique dosage form—clear, nongreasy, cosmetically elegant.

Product Information

Contraindications: Tuberculous, fungal, and most viral lesions of the skin (including herpes simplex, vaccinia, and varicella). Not for ophthalmic use. Contraindicated in individuals with a history of hypersensitivity to any of the components. *Precautions:* Synalar preparations are virtually nonsensitizing and nonirritating. However, the solution may produce burning or stinging when applied to denuded or fissured areas. In some patients with dry lesions, the solution may increase dryness, scaling or itching. Where severe local infection or systemic infection exists, the use of systemic antibiotics should be considered, based on susceptibility testing. While topical steroids have not been reported to have an adverse effect on pregnancy, the safety of their use on pregnant females has not absolutely been established. Therefore, they should not be used extensively on pregnant patients, in large amounts, or for prolonged periods of time. *Side Effects:* Side effects are uncommon with topical corticosteroids. As with all drugs, however, a few patients may react unfavorably to Synalar under certain conditions. In such cases the agent should be discontinued and appropriate measures taken. *Availability:* Synalar (fluocinolone acetonide) Cream 0.025%—5, 15 and 60 Gm. tubes and 425 Gm. jars. Cream 0.01%—15, 45 and 60 Gm. tubes and 120 Gm. jars. Solution 0.01%—20 and 60 cc. plastic squeeze bottles. Ointment 0.025%—15 and 60 Gm. tubes. Neo-Synalar® (neomycin sulfate 0.5% [0.35% neomycin base], fluocinolone acetonide 0.025%) Cream—5, 15 and 60 Gm. tubes.

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From the files of the
COMMITTEE FOR THE
STUDY OF MATERNAL MORTALITY



CASE 16-65, A 40 year old white gravida 8 para 6 ab 1 whole expected date of delivery was January 25, 1966 was admitted at 9:15 PM on November 30, 1965 with the history of spontaneous rupture of the membranes several hours before. Her prenatal course was uneventful. On admission, the blood pressure was 130/82, pulse 81, respirations 20 and temperature 98.0°. The fundus was felt 4 centimeters above the umbilicus. The fetus lay in cephalic presentation, and the fetal heartbeat was counted at 120 per minute in the right lower quadrant. On vaginal examination, amniotic fluid was found in the vagina, and the pH was alkaline by Nitrazine reaction. The cervix was long and firm and was open approximately 1 centimeter. The head lay at station -2. The impression was that of an intrauterine pregnancy at term without active labor, and spontaneous rupture of the membranes.

The next morning a pitocin induction was undertaken. Stimulation was continued for 4½ hours without progress except for a few desultory contractions during the infusion. Pitocin infusions were attempted once more on December 2 and 3, also without success. On December 4, 1965, a consultant recommended that the patient be warned against coitus and douching and she was discharged to await the onset of labor; in the interim he recommended that she be followed in the prenatal clinic. Before she could be discharged on the evening of December 4, her temperature rose to 102° and she complained of generalized aching. The uterus was only slightly tender. Another pitocin induction was begun, and at the same time an infusion containing 5,000,000 units of aqueous Penicillin and 2 grams of Chloromycetin was administered. At 10:00 PM on December 4, the fetal heartbeat had disappeared, and a fetal electrocardiogram showed no positive fetal complexes. There was no change in cervical dilation. A culture of the amniotic fluid showed coagulase-negative staphylococci and diphtheroids. After the pitocin infusion had run for approximately 5½ hours, it was discontinued, and the patient was given heavy sedation and continued on intravenous fluids containing 5,000,000 units of aqueous Penicillin and 2 grams of Chloromycetin. She awoke at approximately 9:00 AM on December 5 complaining of contractions. The temperature was 101° and the vital signs were stable. At 9:30 AM on December 5 she had a shaking chill and her temperature rose to 103.4°. Blood cultures were subsequently reported as showing no growth after 11 days. The aqueous Penicillin was increased to 10,000,000 units per liter of 5 per cent glucose in water. The patient proceeded to go into hard labor and at 12:10 PM on December 5, she delivered a stillborn female infant. The placenta was delivered almost immediately after the baby. The estimated blood loss at delivery was 200 cc.

Immediately following delivery, the patient's blood pressure dropped to 70/40 and continued in a downward direction. A blood count at this time showed a hemoglobin of 13, and a white count of 6,100 with 24 polymorphonuclears, 66 lymphocytes and 10 mononuclears. The patient was thought to be in septic shock. Accordingly, 1 gram of Solucortef was given intravenously. The blood pressure rose to 66/40. Bleeding continued from the vagina. An examination showed the lower uterine segment to be intact. The patient was given 2 units of whole blood during the next 1½ hours to replace observed blood loss. A portable x-ray of the chest taken at the same time was of poor quality, but showed no definite evidence of any active disease. Over the next two hours the total urine output was 5 cc. She was started on Solucortef 250 mg intravenously every half hour until the blood pressure rose. During the next two hours, a total of 2.25 grams of Solucortef was administered.

At 3:30 PM on December 5, the temperature was 102° blood pressure 70/20, pulse 140 and respirations 44. The urinary output was minimal. Because of the continued tachycardia and tachypnea, a medical consultation was requested. An electrocardiogram was done; this showed right axis deviation and right bundle branch block compatible with cor pulmonale. The patient was digitalized rapidly with Cedilanid intravenously. Twenty milligrams of Aramine were added to restore the blood pressure, which at this time was 90/60. The blood pressure rose to 100/60, and the pulse dropped to 112. At 6:45 PM the temperature had dropped to 97.5°. The urinary output had increased to about 40 cc during the last three hours. The vital signs remained in this range over the next six hours. She appeared to improve somewhat clinically. However, at 12:30 AM on December 6 she had a *grand mal* seizure. For a short time prior to the convulsion, the patient had appeared irritable and had been given calcium carbonate intravenously when the irritability was noted, but this had been without observable effect. At the time of the *grand mal* convulsion, 500 mg of Sodium amytal was given intravenously with control of the convulsion. Immediately following the seizure, the blood pressure was 105/70, but it fell rapidly to 80/40. Serum electrolytes determined at this time showed sodium 114, potassium 5.9 and chlorides 82.

At 1:30 AM on December 6, the patient failed to respond to a rapid infusion of Aramine. At approxi-

(Continued on page 201)

Help can be weeks away
for a painful shoulder.

Except with Butazolidin® alka.

If it doesn't work in a week,
forget it.



But don't forget this about Butazolidin alka

Contraindications: Edema; danger of cardiac decompensation; history or symptoms of peptic ulcer; renal, hepatic or cardiac damage; history of drug allergy; history of blood dyscrasia. The drug should not be given when the patient is senile or when other potent drugs are given concurrently. Large doses of Butazolidin alka are contraindicated in glaucoma.

Warning: If coumarin-type anticoagulants are given simultaneously, watch for excessive increase in prothrombin time. Instances of severe bleeding have occurred. Pyrazole compounds may potentiate the pharmacologic action of sulfonylurea, sulfonamide-type agents and insulin. Carefully observe patients receiving such therapy. Use with great caution in the first trimester of pregnancy.

Precautions: Before prescribing, carefully select patients, avoiding those responsive to routine measures as well as contraindicated patients. Obtain a detailed history and a complete physical and laboratory examination, including a blood count. The patient should not exceed recommended dosage, should be closely supervised and should be warned to discontinue the drug and report immediately if fever, sore throat, or mouth lesions (symptoms of blood dyscrasia); sudden weight gain (water retention); skin reactions; black or tarry stools or other evidence of intestinal hemorrhage occur. Make regular blood counts. Discontinue the drug immediately and institute countermeasures if the white count changes significantly, granulocytes decrease, or immature forms appear. Use greater care in the elderly and in hypertensives.

Adverse Reactions: The most common are nausea, edema and drug rash. Swelling of the ankles or face may be minimized by withholding dietary salt, reduction in dosage or use of diuretics. In elderly patients and in those with hypertension the drug should be discontinued with the appearance of edema. The drug has been associated with peptic ulcer and may reactivate a latent peptic ulcer. The patient should be instructed to take doses immediately before or after meals or with milk to minimize gastric upset. Mild drug rashes frequently subside with reduction of dosage. However, rash accompanied by fever or other systemic reactions usually requires withholding medication. Purpuric rash has also been reported. Agranulocytosis, exfoliative dermatitis, Stevens-Johnson syndrome, or a generalized allergic reaction similar to serum sickness may occur and require permanent withdrawal of medication. Stomatitis, salivary gland enlargement, vomiting, vertigo and languor may occur. Leukemia and leukemoid reactions have been reported. While not definitely attributable to the drug, a causal relationship cannot be excluded. Thrombocytopenic purpura and aplastic anemia may occur. Confusional states, agitation, headache, blurred vision, optic neuritis and transient hearing loss have been reported, as have hyperglycemia, hepatitis, jaundice, and several cases of anuria and hematuria. With long-term use, reversible thyroid hyperplasia may occur infrequently. Moderate lowering of the red cell count due to hemodilution may occur.



Dosage in Painful Shoulder: Initial: 3 to 6 capsules daily in 3 or 4 equal doses. Trial period: one week. Maintenance dosage should not exceed 4 capsules daily; response is often achieved with 1 or 2 capsules daily.

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Butazolidin® alka Geigy

Capsules
phenylbutazone, 100 mg.; dried aluminum hydroxide gel, 100 mg.; magnesium trisilicate, 150 mg.; homatropine methylbromide, 1.25 mg.

For complete details, please see full prescribing information.

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400,000 units of potassium penicillin V per teaspoonful

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Potassium Phenoxymethyl Penicillin

Lilly

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The JOURNAL of the
Kentucky Medical Association

ISSUED MONTHLY UNDER THE DIRECTION OF THE BOARD OF TRUSTEES

VOLUME 66 February 1968 No. 2

Recent Trends in Family Planning†

LOUISE G. HUTCHINS, M.D.*

Berea, Kentucky

A survey of new contraceptive methods, their advantages and disadvantages as well as their relative acceptance in several large urban Family Planning Clinics.

MY PHILOSOPHY on family planning is that every woman of whatever race, creed, national origin or economic status should be informed of all the methods of birth control. Then it is up to her and her husband to choose the method they prefer or no method. Twenty-eight years of experience with a practice which ran the gamut from the wives of college professors to the most illiterate and underprivileged women has reinforced this belief. I have never hesitated to ask the overburdened mothers of my pediatric practice whether they would like a rest from childbearing. The response has almost always been an overwhelming, "Yes, I sure would." When they say "No", I never press the matter.

In December, 1964, the American Medical Association declared: "Contraceptive methods should be made available equally to patients whether through private physicians or community sponsored health services. An intelligent recognition of the problems that relate to human reproduction including the need for population control, is more than a matter of responsible parenthood; it is a matter of responsible medical practice."[1]

In the Journal of the A.M.A. in October, 1966 there was a monograph on fertility control principles, methods and their effects. This report adopted by the Committee on Human Reproduction headed by Raymond T. Holden, M.D., of Georgetown University notes that "Failure of the physician to provide birth control or of the couple to use it may result in the birth of a child under circumstances detrimental to it, its family or the society to which the family belongs. . ." Postponing pregnancy is generally advisable for at least a few months of almost every marriage until some of the basic adjustments have been made and in teenage marriages the report continued, "Postponement is especially wise, since such marriages have been correlated with high rates of divorce: the earlier the occurrence of pregnancy in the marriage, the higher the divorce rate."

The A.M.A. reply to the most frequently asked question about birth control—what is the best method—is: "There is no such thing." That's why, argues the monograph, it is important for the physician to understand the pros and cons of all available methods and their relative acceptability.[2]

In the February 27, 1967 J.A.M.A., there are three major articles on contraceptives: *Melasma Induced by Oral Contraceptive Drugs, Evaluation of Intrauterine Contraceptive Devices* and *Evaluation of Oral Contraceptives* and an editorial on *Control of Fertility*.

In the article on evaluation of intrauterine devices from the A.M.A. Committee on Hu-

†*Presented at the Annual Meeting of the Kentucky Medical Association, September 28, 1967*

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man Reproduction, the evaluation has been based on data now available "on the effectiveness, complications and acceptability of this method of fertility control in 22,403 patients with an aggregate period of use of 261,689 woman months. Results reported to date cover the various sizes of four major design modifications—the loop, spiral, ring and bow."[3] They felt evidence insufficient at the present time to permit evaluation of the double spiral device. I might interject here that at the Planned Parenthood Physicians' Conference in Atlanta, April 3-4, 1967, which I attended as a member, Richard L. Day, M.D., Medical Director of Planned Parenthood Association, made a preliminary report on the Saf-T-Coil designed by Ralph Robinson, M.D., of Kentucky. This was based on 732 first and 45 reinsertions and four months of use. The pregnancy rate was .5%, expulsion rate 12% and bleeding and pain 6.8%. Seven physicians in the audience said they had done at least 100 insertions and were pleased with the Saf-T-Coil. It especially suited the private practitioner who does only occasional insertions, as the Saf-T-Coil is packaged in individual sterile units.

The Journal article continues: "Little is known regarding the mechanism of action of the IUD's. The most popular hypothesis is that they increase tubal motility and hence propel the fertilized ovum through the fallopian tube so rapidly that it enters the uterus before it is ready for implantation. It is also possible that the endometrium is affected in such a manner as to make it unsuitable for nidation. The devices do not inhibit sperm migration and there is no histologic evidence that they cause preclinical abortion by expelling an already implanted ovum. Obviously a major research effort is indicated to elucidate the mode of action of these devices."

"In the pooled statistics covering 22,403 women under study, a total of 843 pregnancies have been reported. Of this number, 484 pregnancies occurred with the IUD in place; in the remaining 358, the IUD could not be located during or following the pregnancy and it is assumed that pregnancy began after the unnoticed expulsion of the IUD. Thus cumulative pregnancy rates after one year per 100 women range from 1.8 for the large spiral to 11.9 for the small bow. In general, pregnancy rates for all devices are higher for the smaller sizes than for the larger sizes."[3]

"Expulsion of an IUD after its first insertion occurred in approximately 12.5% of the more than 22,000 women now under cooperative study. In at least 20% and perhaps as many as 30% of these expulsions, the expulsion was unnoticed by the user. First year expulsion rates for the individual devices range from 4.5 for 100 women for the large bow to 31.6 for the small spiral. As might be expected from anatomic considerations, the smaller sized devices are expelled more readily than the larger sizes. Expulsion occurred most frequently during early months of use. At least one reinsertion should be tried after first expulsion, since 70% of women are able to retain the same or another device with a subsequent trial."[3]

"Bleeding after insertion occurs with such regularity that it may be considered an expected consequence of initial IUD usage. Metrorrhagia and spotting are sometimes troublesome but rarely necessitate removal of the device. Most IUD users also note that for one or two months menstrual flow is heavier and somewhat longer than before insertion. Pain of a crampy nature, back ache and other types of pelvic discomfort are also common complaints during the initial period of use . . . in the pooled statistics 10% of the devices had to be removed because of bleeding or pain or both."

"In approximately 2.2% of the women pelvic inflamatory disease developed subsequent to the insertion of the IUD. Sixty percent were treated successfully with the device in place. Perforation of the uterus is the most serious potential complication to IUD use . . . there was an incidence of .2%. The bow was responsible for the majority of reported perforations. Other serious complications of the IUD contraception reported to date include imbedded terminal bead of spiral devices beneath vaginal and cervical mucosa, imbedded devices in the myometrium without perforation, fragmentation of IUD during removal and laceration of the cervix with hemorrhage during insertion."[3] Husbands frequently complain of trauma from the spiral's rigid tail.

"Contraindications: patients with p.i.d. should not be fitted with an IUD. Fibromyomas which might distort the uterine cavity are also a contra-indication as is any abnormal bleeding. . . Because of pain during insertion and the danger of damaging a nulliparous uterus,

the IUDS are generally recommended only for parous women. Insertion is advised toward the end of a menstrual flow in order to obviate interference with a preexisting pregnancy and to minimize complaints. Early postpartum insertion has been tried but as might be expected expulsion is quite frequent. Most IUDS have been inserted six weeks or more after parturition."[3]

"Taking into account such criteria as pregnancy, expulsion, bleeding or pain and p.i.d., the experience accumulated in 261,689 woman months of use for all devices indicates that the larger loops appear to be the most promising." Doctor Lippes reported that five million loops have been inserted with no death to date. "There is abundant evidence that the IUDS are second only to the oral contraceptives in reducing conception rates."[3]

Evaluation of Oral Contraceptives: As oral contraceptives have been used for 11 years and six million American women are now using them, it is a rare doctor, possibly a bachelor in radiology, who does not know a great deal about them. The FDA came out with a comprehensive report August 1, 1966. They discontinued time limitation of administration of contraceptive drugs with this statement: "There is no scientific justification for the present restrictions. They are often circumvented and serve only to penalize the large indigent populations." Under their conclusions they stated: "The Committee finds no adequate scientific data at this time, proving these compounds unsafe for human use. It has nevertheless taken full cognizance of certain very infrequent but serious side effects and possible theoretic risk suggested by animal experimental data and by some of the metabolic changes in human beings. In the final analysis, each physician must evaluate the advantages and the risk of this method of contraception in comparison with other available methods or with no contraception at all. He can do this wisely only when there is presented to him dispassionate scientific knowledge of the available data."[4]

I shall merely touch on some of the new research and major problems associated with their use and then discuss their acceptability in comparison with the IUD. The A.M.A. article states, "It is generally accepted that the oral contraceptives provide the most consistently effective means yet devised for the control of fertility. The available evidence indicates that pregnancy will occur in less than 1% of women who use this method properly."[5]

An interesting angle for further study of the mechanism of contraception was brought out in a paper by S. M. McCann, M.D., from the University of Texas on *Neuro-humeral Control of Gonadotrophin Secretion by Hypothalmic Releasing Factors* read at the Atlanta meeting. He showed that the pituitary gland was the slave of the hypothalamus. An electrode in the hypothalamus produced ovulation.[6]

Precautions: Oral contraceptives tend to inhibit lactation especially if started early in the postpartum period. "When oral contraceptives are considered for use in the diabetic patient their possible adverse effects should be carefully weighed and the status of the patient reviewed at frequent intervals. The possibility that vascular complications sometimes may be caused by oral contraceptives should be borne in mind particularly when these preparations are considered for use in patients with a history of thromboembolic disease or other vascular disease. Central nervous system and ocular complications also have been reported."[5]

I had a patient who had been on a combination oral for two years. She developed blurring of vision which cleared the day after she stopped taking the oral.

The article goes on to say, "Therapy should be stopped and the status of the patient carefully evaluated if any symptoms or signs suggesting cerebro-vascular of ocular changes appear (i.e. diminished visual acuity, optic neuritis, papilledema, retinal vasculitis, vascular occlusion). Headache which occasionally is migrainous may occur with any of these preparations."[5]

I had a married student who had such severe migraine she was coming in for hypodermic relief twice a week. I took her off the oral contraceptive and fitted her with a diaphragm and the migraine stopped at once.

"Occasional subjective changes including irritability, lethargy and depression have been attributed to the oral contraceptives. On the other hand pre-existing similar complaints may be relieved in some patients when they are taking oral contraceptives."[5]

Just as libido is increased in some, diminished in others and stays the same in others, a recent study showed that married

couples on the pills were happier on the whole than those who had gone off them.

The article on melasma by Captain Sorrel Resnik M.C., U.S.A.F., which gives a 29% incidence in oral contraceptive users seems very high from my experience. In the many hundreds of cases I have had, I only remember one. Ringrose had 2% in his report and the women elected to continue tablets.[7] The fact that 87% had also had melanderma during pregnancy is very significant. However Doctor Resnik felt the melasma from contraceptives seemed less reversible than that of pregnancy. Since his was the dermatology service, it might explain that those with melasma would seek out the dermatologist.[8]

"Edema occurs infrequently, presumably as a result of estrogen-induced sodium retention, consequently epileptic patients and those with cardiac or renal disease should be evaluated before oral contraceptive therapy is undertaken and observed carefully throughout the period of treatment. Nausea, which has been a frequent complaint during the first cycles of therapy, usually diminishes as treatment is continued. It may be expected that nausea will occur less frequently and will be milder in the lower dose progestogen estrogen combinations or the sequential preparations."[5]

In my experience the sequentials have fewer side effects, especially nausea. However with the sequentials, it is essential to warn the patient to supplement their use with a conventional contraceptive during the first 10 days of the first cycle of use. Also missing a pill is more likely to cause pregnancy with the sequentials.

"The possible relationship of oral contraceptives to cancer is controversial. Theoretically some risk is incurred with prolonged estrogen therapy; however extensive studies have revealed no evidence of carcinogenisis associated with the use of oral contraceptives." . . . "since the size of uterine fibromyomas may increase sometimes rapidly and extremely, patients with these tumors should be examined regularly when they are receiving oral contraceptives."[5]

I had one woman in her forties who had used the diaphragm successfully for 20 years. Then she requested the pills since her daughter was using them. She was soon hospitalized with severe bleeding requiring a transfusion and it became apparent that she had a myoma. Strangely enough Doctor Goldzieher, who conducted many of the early tests with oral contraceptives and originated the idea of sequential therapy, is now working on a potent new synthetic form of progestin which produces degeneration of tumors of the uterus.[9]

We have seen the pills go from 10 mg. Enovid to 5 mg. and 2.5 mg. and 1 mg. Ovulen. Now there is research on the minidose pill. Martin L. Stone, M.D., has studied 506 women through 3,090 menstrual cycles on one-half mg. of progesterone like chlormadinone acetate one a day every day even during menstruation. Doctor Stone, professor and chairman of the department of obstetrics and gynecology at New York Medical College, reports there have been 12 pregnancies but only five of them have been attributed to ineffectiveness of the drug. The other women admitted they had taken the pills irregularly. Ten percent of them complained of headache.[10]

Injectable Contraceptives: "Two major types of injectable hormone preparations have been used to produce contraception. One involves the use of a potent long acting progestogen with a long acting estrogen given on a once a month basis, and the other relates to the use of a progestogen alone having depot activity. Reifenstein and his associates reported data on the length and characteristics of the menstrual cycles induced by a single 1 ml. injection of 150 mg. dihydroxyprogesterone acetophenide and the 10 mg. of estradiol enanthate given one a month to regularly ovulating women. . . 1 ml. was administered as a deep intramuscular injection given on day 8 after onset of desquamation bleeding. This will fully protect women against conception for 30-60 days. Each was treated for a maximum of six consecutive cycles. . . Tyler reported excellent effectiveness in over 500 women but almost 30 percent experienced troublesome bleeding irregularities. The majority maintained good cyclic patterns."[7]

Daniel Mishell, Jr., M.D., Moustafa El-Habashy, M.D. and Dean L. Moyer, M.D., of U.C.L.A., report on long acting, slowly absorbed depoprovera I.M. in 3,200 women with six unplanned pregnancies or .18 percent. They gave the injection every three months. Spotting and bleeding were a problem. "One should not plan a pregnancy for two years as

the effect of the injection might last one year."[11]

This method had already been shown to be very popular with rural Mexican women. My knowledge of Oriental women and their love of injections would make me think this would be a popular and feasible method for the underdeveloped areas.

John McLean Morris, M.D., of Yale University, has given large doses of standard estrogens to more than 100 women for four or five days immediately after their unwanted coitus—in many cases from rape or incest. There have been no pregnancies. In the absence of short order pregnancy tests no one knows how many there would have been without the medication. The drug produces severe side effects—bleeding, clotting, nausea.[12] In my opinion this would be the ideal method in cases of rape or incest rather than waiting for an abortion after proving pregnancy.

One important phase of contraceptive care is physician understanding and participation but another equally important phase is patient understanding and acceptability of the methods.

A fine piece of pioneer work in a family planning program in a large teaching charity hospital has been carried on since September, 1962 in Grady Memorial Hospital in Atlanta. The first report *A Program in Mass Family Planning for the Urban Indigent in a Charity Hospital* was written by Nicholas Wright, M.D. and Joseph Swartwout, M.D.

"Approximately 7,000 women 80-85% nonwhite are delivered in the hospital yearly. Twenty-five percent of delivered infants had no legal father. Grand multiparity before age 25 was common. In 1961 the perinatal mortality was 38.4 white and 41.7 nonwhite, and premature births represented 16.5% of deliveries compared to 7.9% nationally. A third problem was illegal abortion."[13]

"The Emory University Family Planning Program was organized as an integral part of the postpartum clinics of Grady Memorial Hospital. . . It was decided initially that the service would be completely voluntary and that any woman eligible for care at Grady Memorial Hospital, post partum or non-post partum, could receive information and service compatible with her religious beliefs." A group setting with teaching by a nurse was used. "The teaching at first emphasized the more reliable traditional intravaginal contraceptive methods since these were available to their patients without charge at local county health units through a subsidy of the Georgia State Health Department."[13]

"In early 1963, the oral contraceptives were introduced and by the end of the year had surpassed the traditional methods in popularity. Mothers were routinely evaluated for contraindications to oral contraception at the postpartum exam. If later they chose this method, instructions and a written prescription for a year's supply were given."[13]

"Contraceptive preference has changed dramatically in the past two years (1963-65) at Grady Hospital. More and more women shifted away from traditional methods, first to the oral method and more recently to the intrauterine device. Noteworthy is the decreasing popularity of foam and methods like diaphragm and rhythm." "The most dramatic event of 1964 was the introduction of an intrauterine device to the offered methods. Its acceptance reached 72.6 percent in the second quarter 1965 while the other methods declined in popularity. Acceptance of intrauterine contraception was maintained at this level through 1965." Since patients almost always respond favorably to the idea of family planning or limitation, the group reaction is more important in deciding on a particular method. . . This method is usually the intrauterine device which has in addition to its virtue of requiring only one decision, a certain novelty. . . Impressions gathered from patients returning to the prenatal clinics tended to confirm our suspicion that traditional methods were discarded or irregularly used rather soon after instruction."[13]

"In the case of oral contraceptive, Townsend reported in a series of indigent volunteers given a lecture, a two month supply of pills and a minimal follow-up. When all reasons for discontinuance of pills are considered, 54 percent of the original group remained on oral contraception at 18 months from instruction. Frank and Tietze, in a study of oral contraceptive acceptance in a similar population found a minimal continuance rate of 70.2 percent at 30 months. A follow-up study of a small number of our patients choosing oral contraception showed a 51 percent continuance rate at 12 months. Factors contributing to our lower rate are complete lack of supervision after instruction, the necessity of buying pills commercially and the inclusion of a large proportion of single

and separated mothers. The irregular exposure of these women to pregnancy frequently leads to discontinuance of the oral method and substitution of a less expensive, traditional sex connected method."[13]

I have personally found the mothers of illegitimate children poor users of any method. One of these started the pill when she was one month pregnant. The fact that her child was defective did not seem to me surprising since at least one other of her seven children was defective. To me the ideal method at present is the loop until we can get our laws amended to allow permissive voluntary sterilization of the mothers of illegitimate children who request it.

"By contrast Tietze has indicated that 77.4 percent of patients remain users of intrauterine contraception (Lippe Loop D) at one year from insertion. The family planning clinic at Grady goes into the matter of teaching the patient to check for expulsion rather carefully since routine follow-up visits are offered only at one year from insertion of the device. They offer a nominal "cafeteria choice" but accept responsibility to make contraceptive choice sensible at the outset."[13]

"The cost of adding a family planning program to the postpartum clinic of a large muncipal hospital has been modest . . . it costs $10-11 for each instructed patient. . . Finally more mothers are returning to the postpartum visit for contraceptive service, giving a better opportunity to protect their general health." They conclude, "The setting of the postpartum clinic in a large charity hospital is an ideal one for reaching women of proven fertility who wish to plan or limit family size. No woman with these goals has been denied contraceptive information and service."[13]

Fortunately the first paper from Grady was followed by another one, *An Evaluation of Changing Trends in Contraceptive Choice* by Carl W. Tyler, Jr., M.D., Jack C. Smith, M.S. and Donald L. Eddins, B.S. This was presented at the American Association of Planned Parenthood Physicians, Atlanta, Georgia, April 3-4, 1967. I requested a copy of the paper and permission to share portions of the paper with you which was eagerly given.

"In the first three months of 1965, 62.5 percent of the women cared for in the Emory University Family Planning Program chose intrauterine contraceptive devices; in the last three months of 1966, only 32 percent of the new clinic registrants selected this method of contraception. Since 1962 when oral contraception was first offered to women at Grady Hospital, more than 15,000 women have received contraceptive services. More than 6,000 of these women have been fitted with intrauterine contraceptive devices."[14] A new study was made of the 3,081 women who registered first in 1966. "Although a wide variety of contraceptive methods was offered at the family planning clinic, 51.5 percent of the women chose an oral method and 44.7 percent selected an intrauterine method during the study period. Of these women 34.2 percent came from middle class and 40.3 percent from lower class areas of Fulton County. 23.7 percent resided in other counties in Georgia. Negro women constituted 90.8 percent of the study group. Of the remaining 3.8 percent of 117 women, 110 requested a vaginal foam, three were fitted with a vaginal diaphragm and three were instructed in rhythm."[14]

"Women selecting intrauterine contraception were both older and had more living children than did those who chose oral contraception. During 1966 the median age of all women attending the family planning clinic for the first time decreased from 22.62 years in January to 20.58 years in December."[14]

"During 1966, women began to return to the family planning clinic in increasing numbers with symptoms related to the intrauterine contraceptive devices. By September this was recognized as a sizable problem. By February, 1967 the patients returning to the clinic for follow-up, most of whom were symptomatic, actually exceeded the number of new clinic registrants. Although we doubt that information relating these symptoms to the intrauterine contraceptive device was disseminated in the clinic itself, we have no information about the diffusion of this sort of information in the community."[14]

"In 1965, new clinic registrants who chose intrauterine contraception were both older and had more children on the average than those women who selected this method in 1966. This suggests that the older women who had more children and who desired a relatively permanent method of contraception were already being decreased in number during 1965."[14]

Another report on *Family Planning: Experience At Two Seattle Hospitals* by G. C. Denniston, department of obstetrics and gyne-

cology, University of Washington, tells of a group of 1,076 women attending the combined family planning and postpartum clinics of two large hospitals during 1965. "The group represented 64% of deliveries of the two hospitals during 1965. The women were offered a choice of contraceptive methods and one or other of these was accepted by 908 women, 54% of those delivered. The rest objected to any form of contraceptive or preferred their own methods. The 908 chose as follows: intrauterine device 692 (76%), oral contraceptives 182 (20%), other methods, vaginal foams, diaphragm and jelly, rhythm, tubal ligation or hysterectomy 34 (4%). The chief reasons for the popularity of the IUD were that unlike other methods, it makes no demands on the user and it is highly effective. (One pregnancy occurred among the 692 women who chose this method.)"[15]

In our own Mountain Maternal Health League which supplies 3,000 women throughout Eastern Kentucky, we have been amazed first at the low pregnancy rate of 1½ percent with the simple vaginal foams and foaming tablets. Then we were pleased and surprised that 140 women and 70 men chose sterilization. These families averaged eight children in nine years with less than $2,000 income. One mother had her 21st pregnancy at age 34. We have been pleased that over 400 women have chosen the IUD as it is eminently suited for the rural woman of low income and poor schooling who is far from doctors and drug stores. And lately we have been delighted that over 400 women have chosen the pill. Women with third and fourth grade educations who cannot keep their menstrual charts still take their pills faithfully and send back each month for their free supply. We have had no pregnancies while the women stayed with us.

I feel there is a real place for sterilization as a last resort method of family planning—where the couple is over 30 and has all the children they desire, where there is a real threat to the mother with further pregnancies and especially for the mother near the menopause who cannot tolerate the pill or IUD. In this state it is legal to sterilize husband or wife if they are mentally competent and both sign. However, if a woman has 10 illegitimate children and begs for sterilization it is illegal. Or if there are three generations of 12 children per generation of feeble minded it is illegal to sterilize.

Finally I believe wholeheartedly in the cafeteria approach. No method is right for everyone. Through trial and error individuals come to the method they prefer and which suits them best.

For many years we pleaded with the State Health Department to get into the business of planned parenthood. From 1960-1966 we actively assisted health departments in Eastern Kentucky by providing them with contraceptives. Finally to our great satisfaction in July, 1966 the State Health Department started a program of helping county health departments inaugurate family planning programs. They will provide to any county health department in the state where the county board of health and the county medical society request it, the following maternity services: examination by a physician, pap smear, blood testing for hemoglobin and V.D.R.L. and a choice of contraceptive—intrauterine device, oral contraceptive or vaginal foam. As of May 15, 1967, 75 counties have taken advantage of this offer. Also oral contraceptives have been placed on the Kerr Mills list for physicians to prescribe to the 45,000 women of child bearing age on welfare in the state.

Thus I feel that if the big city hospitals join the county health departments in offering family planning programs, my dream of every woman in the state having access to information and contraceptive supplies will be achieved, and we will be a far healthier, more prosperous state.

BIBLIOGRAPHY

1. *Planned Parenthood News*—Spring 1965, No. 41. p. 2.
2. *Planned Parenthood News*—Winter 1966, p. 6.
3. Evaluation of Intrauterine Contraceptive Devices, Committee On Human Reproduction, *J.A.M.A.*, February 27, 1967, Vol. 199. No 9. pp. 647-649.
4. F.D.A. Report on Oral Contraceptives by the Advisory Committee on Obstetrics and Gynecology, *Food and Drug Administration*, August 1, 1966, p. 13.
5. Evaluation of Oral Contraceptives, Council on Drugs, *J.A.M.A.*, February 27, 1967, Vol. 199. No. 9 pp 650-653
6. *Neuro-Humeral Control of Gonadotrophin Secretion by Hypothalamic Releasing Factors*, S. M. McCann, M.D., professor and chairman, department of physiology, University of Texas Southwestern Medical School. Read at the American Association of Planned Parenthood Physicians Fifth Annual Meeting, April 3-4, 1967, Atlanta, Georgia.
7. Antifertility Agents, Edward T. Tyler, University of California School of Medicine and the Tyler Clinic, Los Angeles, California. Reprinted from *Annual Review of Pharmacology*. Vol. 7. 1967, pp. 601-605.
8. Melasma Induced by Oral Contraceptives, Captain Sorrel Resnik, M.C.U.S.A.F. Scott AFB 111, *J.A.M.A.* February 27, 1967, Vol. 199. No. 9. pp. 601-605.
9. Research Pill Reduces Uterine Tumors, Joseph Goldzieher, M.D. *American Journal of Obstetrics and Gynecology*.
10. Minidose Pill Skirts the Estrogen Problem, Martin L. Stone, M.D., professor and chairman of the department of obstetrics and gynecology, New York Medical College. Given

(Continued on page 201)

The Intensive Cardiac Care Unit in a Community Hospital†

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This paper stresses the need and feasibility of intensive coronary care in a small community hospital and identifies several of the pitfalls encountered in the unit.

STATISTICS indicate that coronary heart disease has become the one greatest threat to life. It accounts for approximately one-half million deaths yearly or one-third of all deaths in the United States *per annum*.

In the Commonwealth of Kentucky, in the year 1965, the total number of deaths from all causes was 30,969. Diseases of the heart accounted for 11,848 deaths, or 38.3% of the total. This figure parallels national statistics. In 1965 in the state of Kentucky, accidents accounted for 1,926 (6.2%) of the state's total deaths. To further emphasize the enormity of heart disease, reflect that as many of our citizens die annually of coronary heart disease as we have militarily committed in our unofficial war in Viet Nam. Fatalities in Viet Nam involve our future leaders. Likewise, significant numbers of cardiac fatalities occur in young individuals during their most productive years.

Western world figures indicate that the mortality rate for myocardial infarction, proven or suspected, is 30% to 32%. Thus, in the pre-Coronary Care Unit era it can be expected that one out of every three patients with acute myocardial infarction will succumb. Since 1962, statistics from Coronary Care Units across the country indicate that arrhythmias, if uncorrected, account for almost 50% of these deaths. Coronary Care Unit experience has confirmed that most of these arrhythmias can be corrected if diagnosed promptly. More important, certain of the more serious mechanism disorders can actually be prevented. Electronic monitoring, by focusing attention on treatable prodromata, negates the necessity for heroic measures. Therefore, prophylactic therapy prior to onset of serious mechanism disorders has become a paramount benefit of the Coronary Care Unit.

Since 1962 the concept of specialized coronary care has gained medical popularity. Today the laity are beginning to expect its inclusion in "their hospital" table of organization, regardless of the hospital size or location.

I believe you would automatically concede the necessity of appropriate surgical facilities in any contemporary general hospital. But, are you aware that medico-legal suits have already been filed, not for error of commission, but for omission of appropriate specialized treatment facilities for coronary artery disease? Should these suits be won, it may become a medico-legal necessity for *each* general hospital to have a Coronary Care Unit or its equivalent specialized equipment. Disregard medico-legal aspects; the need for specialized equipment for the benefit of the coronary patient has already been effectively demonstrated.

What is an Intensive Coronary Care Unit? To me it is a system providing constant observation, providing specially trained personnel, providing electronic monitoring equipment, and providing accessibility of numerous treatment modalities. Its fundamental goal would be to expeditiously aid in the recovery of patients with coronary artery disease, and in broader horizons, all heart disease patients.

Paul Unger, M.D., of the University of Miami School of Medicine, Miami, Florida, has stated: "The primary goal of the Coronary Care Unit is the reduction of mortality of those patients having, or suspected of having, myocardial infarctions as well as certain other potentially dangerous forms of heart disease, such as a serious rhythm and conduction disturbance. The realization of the objective will hopefully be reached by providing a specially de-

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signed, equipped and staffed unit in which these patients may receive constant electronic monitoring coupled with continued specialized medical observation. These efforts are aimed at anticipation, early detection and prompt aggressive treatment of complications of coronary disease such as arrhythmias, cardiogenic shock, cardiac arrest and cardiac decompensation. Appropriate prophylactic treatment is an integral part of this approach. The secondary goal of the Coronary Care Unit must be to provide a continuous learning experience and data for both medical and nursing personnel at all levels in both clinical and research fields, aimed at the goal of more expert management of all cardiovascular patients."

Doctor Unger's expressed goal is most inclusive. How can this be achieved in a small, rather unsophisticated hospital with limited personnel and finances?

Our community hospital, Hardin Memorial Hospital, Elizabethtown, Kentucky, serves a small town of 12,000 people. With the exception of the Armed Services hospital at Fort Knox, it is the *only* hospital located in Hardin County. Prior to this year, in an overcrowded situation it could increase its desirable capacity of 80 beds to 100 beds.

A Hill-Burton financed community enterprise, the hospital this year expanded its minimum bed capacity to 160 beds. Staff physicians include five surgeons, three internists, one pediatrician, one roentgenologist and 12 general practitioners, a total of 22 physicians. The recent building expansion included a spacious emergency room complex, a new x-ray suite, cafeteria, administration offices, operating rooms, and more germane to our subject, a six-bed open ward designated Intensive Care Unit.

A physically separated Intensive Care Unit and Intensive Coronary Care Unit had not been considered in the original architectural plans. Lack of funds prevented later modification. For those of you considering additional expansion, I would strongly urge thorough exchange of information between the architect, the administrator, the medical and nursing staffs prior to finalization of the expansion plans.

The above individuals and individual groups cannot independently decide upon the suitable layout or the proper equipment needs of these specialized areas. All must work synchronously and synergistically.

By combining Intensive Care with Intensive Coronary Care we achieved relative economy at the expense of a really satisfactory coronary care area. This in my estimation was mistake number one.

These units must be staffed. Nurses cannot simply be assigned to them. The best personnel are those who *choose* to work there with or without increased financial compensation. They must be specially trained. This will become a physician obligation. Without this special training the expensive equipment will be visually impressive, totally inoperative, and will represent a monumental waste of money.

With the exception of one, our nursing staff had no noteworthy experience with the operation of a Coronary Care Unit. Interest was evident and a nucleus of registered nurses and licensed practical nurses was formed. Staff physicians were then asked to lecture. There had been no pre-lecture planning between nursing staff and medical staff. Called upon to organize lectures pertaining to the coronary care portion of the unit, I can comment favorably on the enthusiasm and the very quick grasp of the material presented to these nurses. These lectures were well attended and actually became very gratifying to the lecturer. For those of you facing a similar duty in your respective hospitals, I found the book "Intensive Coronary Care, A Manual for Nurses", by Lawrence E. Meltzer, M.D., *et al,* published by the Charles Press, New York, New York, an invaluable guide.

Nevertheless, the lack of pre-planned instruction was mistake number two. Obviously with abundant monies at one's disposal, all nurses could well be sent to several existing instructional institutions. This may be desirable but not always feasible. By necessity, most instruction will fall upon the shoulders of the internist or internists as the case may be.

Specialized and costly equipment was needed. Perhaps because of cost consideration, our equipment was decided upon and purchased without physician consultation. Although the equipment is functional, it is not quite suited to either the space needs nor the patient needs. This was mistake number three. I feel that practically no specialized coronary care equipment should be purchased until there has been discussion with and approval by ap-

propriate members of the medical staff. Patient needs, medical staff needs, and available funds must dovetail.

A cart-housed mobile, R-synchronized depolarizer, electrocardiograph combination, with a detachable monitorscope, sentinel, and versatile pacemaker constitute the original major unit. The sentinel consists of a heart-rate meter and alarm. The monitorscope illuminates a small screen and emits a beep signal. The screen is too small though it has good clarity; the beep cannot be adequately modulated. Fortunately, the pacemaker is versatile in that it can be used as a manual, automatic, or demand pacer. Transvenous catheters were neglected.

The equipment detailed cost approximately $3400. A second monitoring scope, at an additional cost of $600, completes the electronic equipment. Total cost was $4000 to service two adjacent beds. Since none of the electronic equipment is wall-mounted, but rather, rests on the mobile cart containing the depolarizer, the depolarizer loses its mobility of usage for any patient not being monitored.

Wall suction and oxygen outlets and wall-mounted blood pressure manometers are provided for all six beds in the unit. Satisfactory resuscitator-inhalator (E&J) extension units to match the wall oxygen outlets completed the standard services. All beds are non-electric, highly mobile, adequately narrow units. Their greatest defect is their fixed height from the floor to the mattress, which is too high. This produces quite a burden upon our nurses when they attempt to ambulate the patients. Other equipment such as airways, various sized endotracheal tubes, adaptors, laryngoscopes, drugs, and fluids are all housed in the unit in designated areas.

The day the Intensive Care Unit opened, the assigned nursing staff had received minimum training. The unit, as might be expected, was first utilized for severely ill accident and post-operative cases. There was "spin off" benefit when the specially trained nurses were called upon to demonstrate closed chest cardiac massage to several of these "off monitor" patients.

Neither my associate nor myself felt justified in placing our patients in the unit for approximately one month after its opening. We continued our nursing training program and finally, in May of 1967, placed our first patient in the unit. I might add that none of the other staff physicians preceded us although the monitored beds were and are open for usage by all staff physicians. This raises an interesting procedural point. Many larger hospitals require rigid rules for patient unit admission. In some, the chief cardiologist imposes a semi-flexible treatment guide.

We preferred full availability to all staff physicians. I had hoped they would attend the posted nurses' training lectures. Complete benefit cannot be achieved unless participating physicians are fully cognizant of equipment operation. It is my desire that as physicians "adopt" the unit, they will learn to use it to their patients' best advantage.

Our unit's first coronary patient was destined to become quite a challenge. She was an obese, hypertensive, 68 year old female, admitted to the general medical service May 1, 1967, with symptoms of severe precordial pain, radiating to the left shoulder and left arm. Nausea and vomiting were present. She previously had many episodes of dyspnea and milder precordial pain. There was past history strongly suggesting cholecystitis. Subsequent to admission, serial electrocardiograms and serial transaminase studies confirmed an acute inferior wall infarction. PVC's and 1st degree block were also present. A portable chest x-ray revealed a cardio-thoracic ratio of 17 cm to 27.5 cm as well as congestive changes in the left base.

She remained on the general medical floor from May 1, 1967 until May 21, 1967. A cardiac evaluation was requested May 12, 1967. PVC's had increased and the patient was felt to be in congestive failure. Digitalization was begun. Nausea and chest pain remained constant symptoms throughout her entire hospitalization. At times there was transient improvement. PVC's decreased but weakness and dyspnea persisted. ECG's revealed an evolving inferior infarction.

The night of the 20th hospital day she developed increased precordial pain at 7:15 p.m. Referring to the nurses' notes of the general medical floor, the patient received morphine at 7:30 p.m. At 8:00 p.m. the floor nurse noted that her pain was "not much better" and her apical rate was 150 per minute. At 8:15 p.m. the attending physician was notified

of the continued pain and the rapid rate. The next notation reveals that intravenous procaine amide was administered at 9:00 p.m. by the attending physician, after ventricular tachycardia had been documented. In other words, approximately one hour elapsed from probable onset to therapy for this patient's arrhythmia. Please be reminded that most small hospitals do not enjoy the luxury of interns and residents, and general floor nurses are not trained to replace them.

At this point the patient was placed in the ICU and monitored continuously. (I might add that conversion to sinus rhythm had occurred after injection of 2 cc procaine amide intravenously.) During the ensuing eight days in the ICU the patient continued to have frequent episodes of ventricular tachycardia. These were promptly recognized by the nursing personnel, documented by direct write-out, and converted with either intravenous xylocaine or procaine amide.

Nevertheless, the patient continued to deteriorate. Shock complicated her condition on the eighth day in the ICU, and on the ninth day she developed ventricular fibrillation. The nursing personnel recognized the difficulty, documented this arrhythmia, and delivered countershock, but without success. This first case, although a fatality, demonstrated that rapid recognition and treatment are possible under less than ideal conditions.

Another interesting patient was a 75 year old male who developed substernal chest pain while driving a tractor May 29, 1967. The pain increased and he was admitted to the general medical floor. Past history revealed exertional dyspnea with precordial pain over a two year period. On admission he was minimally cyanotic and hypotensive. Venous pressure was not elevated; there were fine rales in the left lung base. Heart tones were distant and an S-3 gallop was present. There was no peripheral edema.

Initial transaminase was elevated; an electrocardiogram revealed a right bundle branch block and evidence of an acute inferior myocardial infarction. Chest x-ray revealed normal sized heart and heavy markings in the right base.

Anticoagulants and supportive therapy were instituted. He felt fine by the fourth hospital day. However, serial electrocardiograms revealed prolongation of his PR interval followed by second degree heart block with Wenckebach intervals. The fifth day he was transferred to the ICU and placed "on monitor". During the next 24 hours his second degree block disappeared as did the prolongation of his PR interval. Prior to the disappearance of the second degree block, the reassurance of a transvenous catheter would have been appreciated.

He returned to the general medical floor after three days in the ICU and was discharged home June 15, 1967.

In the months of May, June, and July, four patients with proven myocardial infarction were placed on monitor in the unit. They exhibited arrhythmias varying from frequent VPC's to ventricular fibrillation, premature atrial contractions, to atrial fibrillation, varying degrees of block and short periods of sinus arrest. All recovered, except the first case previously described.

During the same period of time, three non-infarction cases were treated in the unit. One with PAT had chemical conversion while "on monitor". The remaining two were traumatic cases, both surviving closed chest massage for cardiac arrest occurring while "off monitor". Since the arrests were not documented electrocardiographically, I cannot determine whether there was a bit of over-zealousness on the part of the nursing personnel to practice what they had been taught.

In the same period of three months, 10 patients with a diagnosis of proven acute myocardial infarction were admitted to and treated on the general medical floor of the hospital. Three exhibited first degree block on serial electrocardiograms; one had numerous PVC's and one a right bundle branch block. Only one of the 10 was noted to develop congestive failure. All recovered and were discharged.

Simultaneously, 12 cases diagnosed as probable myocardial infarction were admitted to and treated on the general medical floor. Ten recovered, two died—one with a left bundle branch block followed by cardiac arrest, the other in congestive failure followed by nodal tachycardia.

The terms *proven* acute myocardial infarction versus *probable* acute myocardial infarction are arbitrary and deserve definition. Patients with significantly elevated transaminase determinations in addition to serial electrocardiographic changes consistent with a "through

and through" infarction were classified as *proven* acute myocardial infarction. Those with significantly elevated transaminase studies but with electrocardiographic evidence of ischemia or subendocardial infarction were termed *probable* acute infarction.

During the three-month study period 14 *proven* and 12 *probable* acute myocardial infarctions were hospitalized. Four of the *proven* and none of the *probable* infarctions were transferred to the ICU. One *proven* (in ICU) and two *probable* (not in ICU) succumbed. The three-month mortality rate for a total of 26 patients was 12%. This is statistically meaningless. For example, in the two-year period 1965-1966 there were 155 hospital admissions diagnosed as *proven* or *probable* acute myocardial infarction. There were 50 deaths or a mortality rate of 32%.

In summary, the following points of interest have been reaffirmed or realized: Patients with acute myocardial infarction will be admitted to the smallest of community hospitals as well as to the largest. They can develop serious arrhythmias in either place. Prompt recognition and treatment of these arrhythmias will often prevent fatalities. If electronic monitoring is available, many serious arrhythmias can be prevented. Early evidence of other complications such as failure or shock can be detected best under constant supervision. A specially-designed and -equipped hospital area utilizing specially-trained personnel is within the scope of a small community hospital. It will offer the best means of properly caring for the coronary patient. Efficient operation can be achieved most satisfactorily when thorough communication flows between all pertinent hospital departments. The introduction of such a unit upgrades medical service throughout the entire hospital. I envision small areas designed to accommodate not only patients with myocardial infarctions but patients with any type of heart disease. These areas should permit privacy for the patient, expert nursing supervision, and quick availability of the sophisticated electronic equipment available today.

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References: 1. Isenberg, H. D.: Clinical Evaluation of Laboratory Guidance to Antibiotic Therapy; Health Laboratory Science (July) 1967. 2. Saslaw, S., Carlisle, H. N.: Studies on Therapy of Staphylococcal Infections in Monkeys. I. Comparison of Cloxacillin, Triacetyloleandomycin and Erythromycin. Proc. Soc. Exp. Biol. & Med.: Vol. 125, No. 4 (Aug.-Sept.) 1967.

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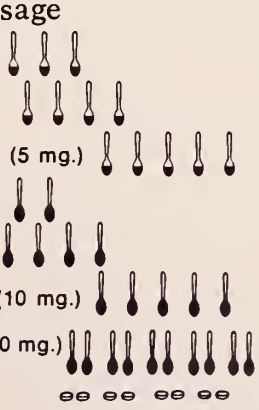
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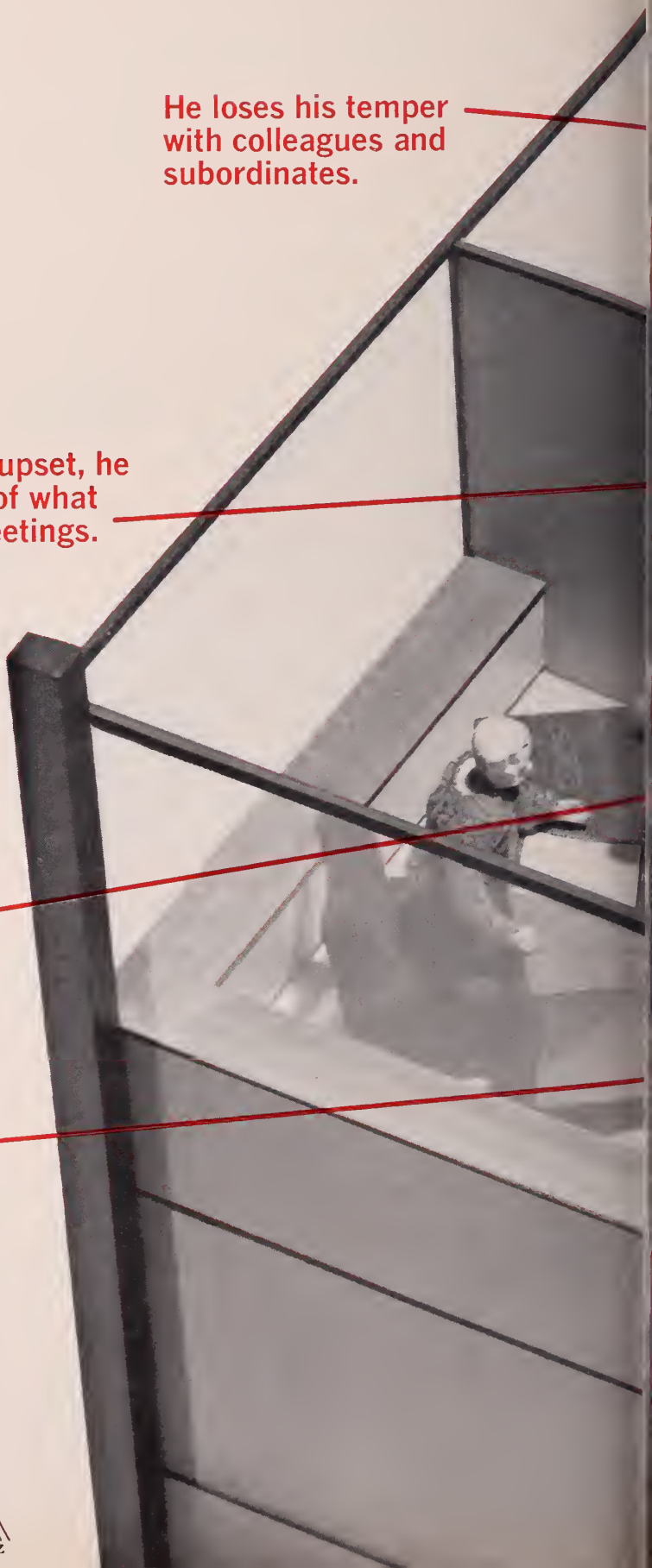
He goes home at night and takes it out on his family.

He loses his temper with colleagues and subordinates.

Emotionally upset, he misses half of what is said at meetings.

He is always fearful about his standing with the boss.

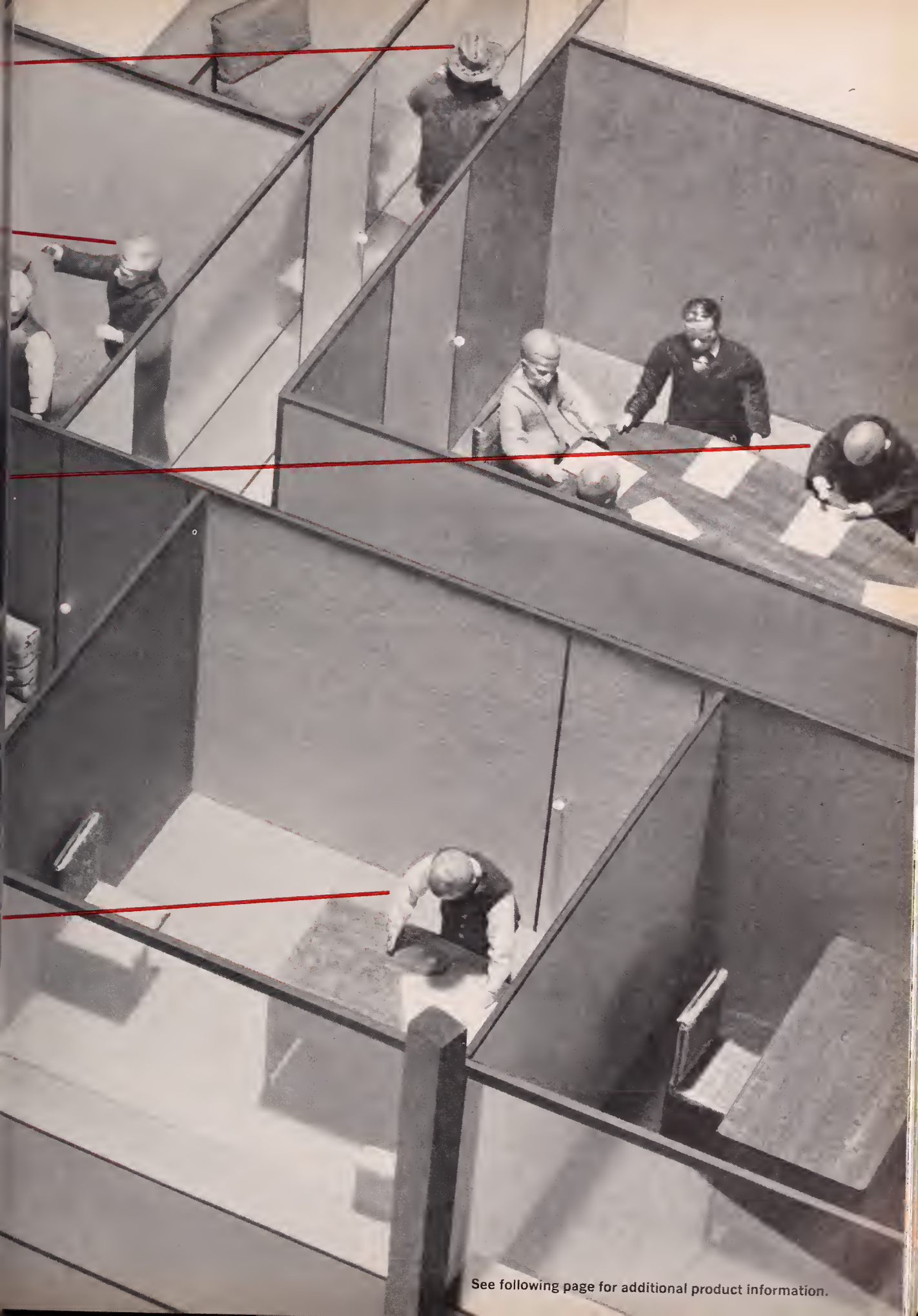
He just can't seem to settle down to his work.



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Shock—Current Concepts of Etiology, Pathophysiology and Therapy†

J. Kent Trinkle, M.D.,* R. Herman Playforth, M.D.,** and Mark A. Fullmer, M.D.***

Lexington, Kentucky

An etiologic classification of shock is presented and the various metabolic derangements which comprise the shock syndrome are discussed. The value of a central venous pressure, pH and oxygen saturation as a guide to fluid, colloid and buffer therapy is emphasized.

SHOCK is a misunderstood and frequently mistreated clinical syndrome. Our medical predecessors defined shock as a "momentary pause in the act of death" and "the body's final parry to the trust of death."[1] Recent clinical and experimental research allow a more scientific approach to understanding the mechanism and management of shock. The authors define shock as the syndrome of the response to cellular hypoxia—although the etiology and mechanism may vary, the final common physiological lesion is cellular hypoxia. As stated by Haldane,[2] "Hypoxia not only stops the machinery, it wrecks it."

Classification

The classification of the various types of shock must be approached on the basis of etiology since all types rapidly form a similar syndrome regardless of the initial metabolic insult.

1. CARDIOGENIC shock is defined as the shock syndrome initiated by failure of the heart to pump an adequate volume of blood. The initial lesion may be a myocardial infarction, arrhythmia, cardiac tamponade, pulmonary embolus or valvular defect. With other types of shock, decreased coronary blood flow, acidosis and metabolic byproducts may cause secondary cardiac failure thus superimposing cardiogenic shock on a shock syndrome of different etiology.

2. HYPOVOLEMIC shock may be produced by any loss of intravascular volume—whole blood (hemorrhage), extracellular fluid (dehydration), or plasma (burns and malnutrition). The volume loss may be external, or into the intracellular space, body cavities and bowel lumen.

3. SEPTIC shock is produced by bacteria or bacterial products. Gram negative organisms cause an intense arteriolar spasm and gram positive organisms produce arteriolar dilatation. The net effect of all septic shock is a decrease in capillary blood flow and increased permeability of the capillary wall with loss of circulating fluid and plasma into the interstitial space.

4. HYPOXIC shock is the result of inadequate oxygenation of arterial blood due to respiratory insufficiency. Most patients can tolerate arterial oxygen desaturation as low as 85%—beyond this point there is cellular hypoxia and acidosis.

5. NEUROGENIC shock is mentioned only to be condemned. The term implies that neurologic injuries can cause a shock syndrome —many lives have been lost due to this inaccurate concept. It is safe to assume that neurogenic shock does not occur and that any patient with a head or spinal injury in clinical shock undoubtedly has associated hypoxia, sepsis, cardiac failure or blood loss.

Cellular Hypoxia

Figure 1 briefly diagrams the cellular metabolism of glucose. Each six-carbon glucose molecule is converted into two three-carbon pyruvate molecules with the release of two hydrogen ions and energy in the form of

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****Resident physician, department of surgery*

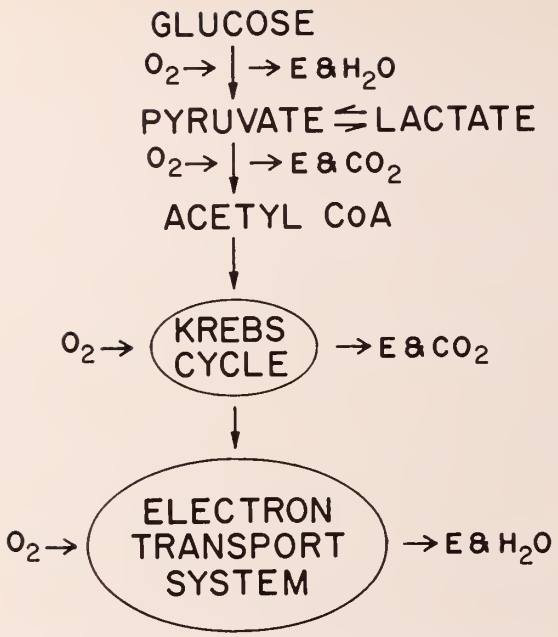


FIGURE 1. An abbreviated diagram of glucose metabolism. Each 6-carbon glucose molecule yields two 3-carbon pyruvate molecules with the release of energy (E) and two hydrogen ions which combine with oxygen (O_2) to form water. In the absence of O_2, the hydrogen ions combine with pyruvate to form lactate. At each subsequent degradation, O_2 is consumed and energy as ATP plus either H_2O or CO_2 is released.

ATP. The hydrogens ions combine with oxygen to form water. If oxygen is not available, each hydrogen ion combines with a pyruvate molecule to form lactate which then accumulates as a metabolic waste. At each subsequent step, energy is released and oxygen is utilized to combine with hydrogen ions to form water or with carbon ions to form carbon dioxide. The water and carbon dioxide are excreted and the energy is stored as phosphate bonds in ATP. If oxygen uptake by the cell is diminished, glucose metabolism slows with a decrease in ATP and an increase in hydrogen ions. Clinical and experimental studies indicate that in shock blood lactate increases,[3, 4] metabolic acidosis occurs[5] and tissue stores of ATP decrease.[6] Isotope dilution studies demonstrate deficits in intravascular and extracellular volume with an increase in intracellular water.[7] Due to the lack of energy as ATP, the sodium-potassium pump fails and intracellular potassium is released into the extracellular and intravascular spaces.[8] As cellular energy stores are further depleted, protein synthesis stops and there is a breakdown of the lysosomes with the release of enzymes (protease, esterase, and phosphatase) with autodigestion and destruction of the cell.[9] At this point the machinery is wrecked.

Microcirculation

The microcirculation is diagramed in figure number 2. Microcirculation refers to an individual arteriole and venule with the interposed capillary bed. Blood flow through the microcirculation is regulated by the mean pressure gradient and the total resistance between the arteriole and venule. The mean A-V gradient may vary between 40 and 100 mm Hg—a 250% change. Resistance is altered by changes in three factors: 1) critical closing pressure (capillary intraluminal pressure minus tissue pressure), 2) viscosity of the blood, and 3) vascular tone.[10]

Vascular tone alteration is by far the most important factor in regulating flow in the microcirculation and is influenced by the following mechanisms:

1) Neurogenic—somatic afferent (sensory) fibers respond in a reflex fashion to either pain or irritation by dilating the underlying capillary bed. Autonomic vasoconstrictor fibers from the thoracolumbar ganglia supply all arterioles, except those in the heart and brain, and release norepinephrine at the myoneural junction producing vasoconstriction. The lack of vasoconstrictor fibers in the arterioles in the heart and brain explain the disproportionate maintenance of blood flow to these two organs during shock when the rest of the vascu-

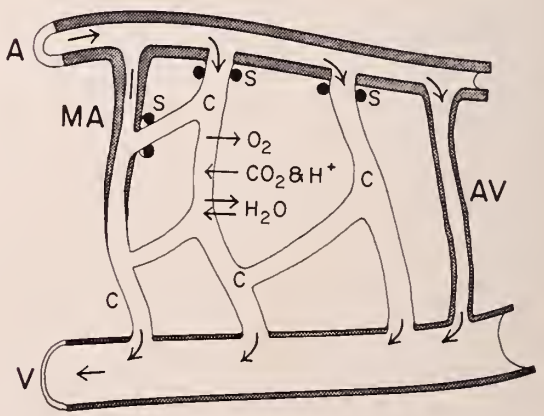


FIGURE 2. A—arteriole, V—venule, MA—metarteriole, AV—arteriovenous shunt, C—capillary, and S—precapillary sphincter. Normally all blood flow is through the metarteriole and AV shunt but during periods of increased metabolic activity the entire capillary bed may be perfused.

lar tree is in a state of vasoconstriction. There are also autonomic vasodilator fibers which run with the vasoconstrictors, but have a different central connection. These fibers supply the viscera and produce active vasodilation.

2) Humoral control of the microcirculation is primarily the function of the catecholamines—epinephrine and norepinephrine. Epinephrine acts on both the arterioles and the precapillary sphincters to decrease skin flow and increase muscle flow. The catecholamines act on receptors in the circular smooth muscle in the vessel wall—alpha receptors produce vasoconstriction and beta receptors produce vasodilation. Thus the different response of vessels in the skin and muscle is due to the difference in the distribution of alpha and beta receptors. Norepinephrine acts only on the alpha receptors and therefore produces only vasoconstriction. Other humoral agents such as histamine, bradykinin, kallidin and oxytocin are vasodilators and counteract the vasoconstrictive effects of the catecholamines.

3) Local regulation—The smooth muscle in the arterioles and precapillary sphincters has autogenous tone. An isolated arteriole remains in a state of partial contraction. Physical factors such as cold, trauma, and intraluminal pressure may increase the autogenous tone. Increased metabolic activity of the adjacent tissues will decrease the smooth muscle vascular tone independent of neural and humoral influences—perhaps in response to PO_2, PCO_2 or pH changes.[10]

The functions of the microcirculation are gas, solute and fluid exchange. The efficiency of these functions is regulated by the total surface area of capillaries being perfused and the time blood is in contact with the capillary wall. When blood flow through an arteriole increases and precapillary sphincters relax to perfuse a greater proportion of the capillary bed, the efficiency of these functions increases. If the arteriole and precapillary sphincters contract, the function of the capillary bed decreases.

Pathophysiology

Every organ participates in the shock syndrome by altering its function as a defense against the metabolic insult. The physiologic alteration is qualitatively similar in all forms of shock regardless of the precipitating insult.

1. Cardiac: The initial cardiac response is a decrease in output. This is counteracted by the pressure receptors in the aortic arch and the carotid sinus which, in response to hypotension, induce a reflex increase in heart rate, stroke volume and vasoconstriction. Blood pressure may remain normal until severe shock is present due to the action of the pressure receptors. The decreased capillary perfusion and cellular hypoxia in turn result in acidosis and the production of certain humoral factors which directly depress myocardial contractility thus perpetuating the decreased cardiac output. Left atrial and central venous pressure are intially low but later rise as the myocardium fails.[11]

2. Pulmonary: The chemoreceptors in the lungs respond to acidosis by hyperventilation which increases acid excretion in the form of CO_2. As shock progresses there is a loss of pulmonary elasticity due to the sequestration of fluid in the interstitial space and increased capillary permeability with pulmonary edema.[8] There is also a decrease in surfactant which promotes atelectasis. Pulmonary arteriolar vasoconstriction causes pulmonary hypertension and the sequestration of red blood cells within the pulmonary capillaries.

3. Renal: During shock, renal blood flow is decreased and the kidneys conserve circulating volume by decreasing the output of water and sodium. Urine volume decreases with an increase in specific gravity and a sodium concentration below 40 meg./L. Acid excretion by the kidneys reaches a maximum of 225 meq./day compared to 30,000 meg./day by the lungs. However, only the kidneys can excrete the organic anions.[13]

4. Blood: During shock the blood buffer reserves are diminished by combining with hydrogen ions. Normal total body buffering capacity is approximately 900 meq.[13] The CO_2 combining power and pH decrease and the venous oxygen saturation falls due to the low cardiac output and extraction of a greater percentage of the blood oxygen. Coagulation defects may occur due to wide-spread intravascular clotting in the microcirculation.[14]

5. Adrenal: The secretion of cortisol and epinephrine by the adrenal glands increases in shock.[15]

6. Pancreas: Pancreatic ischemia during shock releases proteolytic enzymes which act

on a plasma factor to produce kallidin—a vasodilator.[16]

7. Gastrointestinal: Decreased blood flow to the GI track during shock results in mucosal ischemia and a decrease in mucin production which favors peptic ulceration. Gastrointestinal hemorrhage is frequent in shock.[17]

8. Reticuloendothelial system: The RE system is depressed during shock resulting in a decrease in antibody production and phagocytosis. Patients in shock are more susceptible to infections.[18]

Clinical Diagnosis of Shock

A frequently heard phrase is that "the patient looks shocky." There are a number of clinical signs which the astute clinician recognizes as comprising the shock syndrome. The patient is disoriented, skin and mucous membranes are pale and cold, and the nail beds refill slowly after blanching. The neck veins are usually flat and peripheral veins fill slowly. The pulse is rapid and sometimes difficult to palpate due to vasoconstriction. Respirations are deep and rapid due to acidosis. Urine output is decreased with a high specific gravity. The arterial pressure may be normal initially since hypotension is a late sign of shock.

A valuable asset in the diagnosis and treatment of shock is a central venous catheter—a large caliber plastic catheter inserted into the superior vena cava by way of the antecubital, external jugular or subclavian vein. Central venous pressure is normally 3 to 6 cm. H_2O, but in shock the pressure is low or negative. The catheter can be used for pressure measurements, as a "life-line" for the rapid infusion of fluid and colloid, and as a source for central venous blood samples for pH and O_2 saturation. Central venous pH is normally between 7.30 and 7.40 and oxygen saturation above 65%. In shock the venous pH falls due to metabolic acidosis and the oxygen saturation decreases due to the low cardiac output. Venous pH below 7.20 indicates serious acidosis and venous oxygen saturation below 50% a dangerously low cardiac output. More complex measurements such as cardiac output, cardiac index and blood volume are rarely available and seldom yield as valuable information as the central venous pressure, pH, and oxygen saturation.

Therapy of Shock

Therapy of shock should be directed first to alleviate the etiology and second to correct the various metabolic changes which accompany shock.

1) Volume replacement: In all forms of shock, except perhaps pure cardiogenic, there is a deficit in the intravascular and extracellular volume. The loss of volume may be external as in hemorrhage or dehydration, into the intracellular space as in sepsis, or into the various body cavities. Circulating volume should be restored rapidly with both fluid and colloid until the central venous pressure rises to 8-10 cm. Cardiac filling and cardiac output improve when the central venous pressure is higher than normal levels and massive volumes of fluid and colloid are sometimes needed to correct the deficit. The first line of defense in volume replacement should be lactated Ringers solution or normal saline. The concept that patients losing blood need blood or plasma is not always valid. As much as 20% (800-1200cc) of the circulating blood volume can be lost and replaced with only saline or lactated Ringers solution; however, approximately four times the volume of shed blood should be administered (4,000 cc for a 1,000 cc blood loss).[19, 20] Hemodilution to a hematocrit of 20% or 25% may even be beneficial by preventing sludging of red blood cells and intravascular coagulation in the microcirculation.[14]

Urine output and specific gravity should be monitored hourly and fluid replacement continued until the output is above 50 cc/hr and specific gravity below 1.020. In the presence of a low urine output, a urine/blood urea ratio above 15/1 or a urine sodium concentration below 40 meq./L, indicates good renal function but decreased renal blood flow due to a volume deficit.

Acidosis should be corrected with intravenous sodium bicarbonate which is available in 50 cc ampules containing 44 meq. Patients in profound shock may require as much as 100-200 cc of this solution to correct the metabolic acidosis. Periodic central venous pH measurements are a good guide.

Antibiotics are frequently utilized prophylactically due to the depression of the reticuloendothelial system and the increased susceptibility of the patient to infection.

Vasopressors are mentioned only to be condemned. Shock is usually accompanied by profound peripheral vasoconstriction resulting in decreased tissue blood flow and cellular hypoxia—vasopressors only intensify this mechanism. Perhaps the only vasopressor which is beneficial in shock is isoproterenal (isuprel) which has positive inotrophic and chronotrophic cardiac effects, but which, unlike other vasopressors, decreases peripheral vascular resistance. There is some evidence that vasodilating agents such as di-benzyline, regitine and thorazine are beneficial in shock by counteracting vasoconstriction.

Other supportive measures of value in shock include steroids to decrease capillary fragility, nasal oxygen and respiratory support to increase arterial oxygen content, osmotic diuretics such as mannitol to prevent renal tubular necrosis, digitalis to increase cardiac contractility and hypothermia to decrease the body's metabolic needs.

Summary

An etiologic classification of shock is presented and the various metabolic derangements which comprise the shock syndrome are discussed. The ultimate common metabolic lesion in all types of shock is cellular hypoxia with metabolic acidosis and depletion of energy stores. The value of a central venous pressure, pH and oxygen saturation as guide to fluid, colloid and buffer therapy is emphasized.

Bibliography

1. Warren J. C.: *Surgical Pathology and Therapeutics, Shock;* Philadelphia: W. B. Saunders Company, 1895, XI, 279.

2. Haldane J. S. Priestly J. G.: *Respiration;* Rev. edit., Oxford: Clarendon Press, 1935.

3. Broder G., and Weil M. H.: *Excess Lactate: Index of Reversibility of Shock in Human Patients;* Science 143:1457-1459, Mar. 27, 1964.

4. Huckabee W. E.,: *Relationship of Pyruvate and Lactate During Anaerobic Metabolism. III Effect of Breathing Low-Oxygen Gases;* Clin. Invest. 37:264, 1958.

5. Kovack A. G. B.: *The Biochemical Response to Injury;* Academic Press, New York, 1960.

6. Talaat S. M., Massion W. H. and Schilling J. A.: *Effects of Adenosine Triphosphate Administration in Irreversible Hemorrhage Shock;* Surgery 55:813-819, June 1964.

7. Shires T., William J., and Brown F.: *Simultaneous Measurement of Plasma Volume, Extracellular Fluid Volume, and Red Blood Cell Mass in Man Utilizing* I^{131}, $S^{35}O_4$, *and* CR^{51}; J. Lab. and Clin. Med. 55:776, 1960.

8. Thal A. P. and Wilson R. F.: *Shock: Current Problems in Surgery;* Year Book Publishers, Sept. 1965.

9. deDuve C.: *Lysosomes: A New Group of Cytoplasmic Particles;* New York: Ronald Press Co., 1959.

10. Windsor T. and Hyman C.. *Peripheral Vascular Disease;* Lea and Febiger, Philadelphia 1965, Chapter 3.

11. Guyton A. C. and Crowell J. W.: *Cardiac Deterioration in Shock;* Intern. Anesthes. Clin. 2:183, 1964.

12. Pattle R. E.: *Properties, Function and Origin of Alveolar Lining Layer;* Nature, London 175:1125, 1955.

13. Moore F. D.: *Metabolic Care of the Surgical Patient;* W. B. Sanders Co., 1960.

14. Hardaway R. M.: *Studies on the Role of Intravascular Coagulation in Irreversible Hemorrhagic Shock;* Ann. Surg. 155: 241, 1962.

15. Melby J. C. and Spink W. W.: *Comparative Studies on Adrenal Cortical Function and Cortisol Metabolism in Healthy Adults and in Patients with Shock;* J. Clin. Invest. 37:1791, 1958.

16. Werle E.: *Kallikrein, Kallidin and Related Substances;* Pergamon Press, New York, 1960.

17. Penner A. and Bernheim A. I.: *Acute Postoperative Esophageal, Gastric and Duodenal Ulcerations;* Arch. Path. 28: 129, 1939.

18. Zwerfach B. W.: *Contribution of Reticuloendothelial System to Development of Tolerance to Experimental Shock;* Ann, New York Acad. Sc. 88:203, 1960.

19. Rush B. F.: *Treatment of Experimental Shock: Comparison of the Effects of Norepinephrine, Dibenzyline, Dextran, Whole Blood and Balanced Saline Solutions;* Surgery 61:938-944, June 1967.

20. Rush B. and Eiseman B.: *Limits of Non-Colloid Solution Replacement in Hemmorrhagic Shock;* Ann. Surg. 165:977-982, June 1967.

Have You Made Reservations?

KMA Interim Meeting

April 17-18

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SPECIAL ARTICLES

Home Evaluation Forms For High-risk Infants†

GUY C. CUNNINGHAM, M.D.*

YOUR study committee to lower perinatal mortality and morbidity in the commonwealth is pleased to report that its home evaluation forms for low birth weight and other high-risk newborns submitted to the House of Delegates was adopted for implementation. The form results from the combined efforts of your study committee, the Committee on Fetus and Newborn of the Kentucky Chapter, American Academy of Pediatrics and the Kentucky State Department of Health, Division of Maternal and Child Health.

Forms will be distributed by resident county health departments to all Kentucky hospitals providing nursery facilities. The request for home evaluation is initiated by the attending physician. This form containing identifying information and brief statement of problem is forwarded to the resident county health department as soon as it is determined that the infant will survive.

The public health nurse will make the home visit and return the evaluation form to the nursery chart and a copy to the physician who will see the infant for continuing medical care. The evaluation form provides information relating to health of others in home; communicable diseases; home environment; equipment available for infant care and ability and attitude of person who will care for infant.

A notice of discharge will be forwarded to the resident county health department if this is the facility that will provide all or part of continuing care, or if the attending physician wishes the public health nurse to make further home visits in the infant's behalf.

The Kentucky State Department of Health has given priority to this group of high-risk infants. It is proposed that requests be limited to low birth weight infants and other infants deemed high-risk because of special medical, surgical and environmental problems.

The purpose, of course, and anticipated results of this cooperative effort will be a significant reduction in mortality and morbidity of those infants who are survival risks at the time of nursery discharge.

We are most grateful to the Department of Maternal and Child Health, Kentucky State Department of Health for their splendid cooperation and many hours given to this task.

†Report of Perinatal Mortality and Morbidity Study Committee

**Chairman of the Perinatal Mortality and Morbidity Study Committee practicing in Ashland*

EDITORIALS

Polluted Air

ON EVERY hand, in every public medium of communication, we find increasingly frequent discussions of the air we breathe. Auto makers, politicians, engineers, industrialists, and most of all just plain citizens —all are concerned and becoming more so. Hazy, acrid, odorous, dusty air is a fact of life to those who live in urban areas, but in many rural areas piles of mining refuse ("gob piles") burn for years on end, and charcoal burning operations, rock crushing plants, fertilizer factories, etc. dot the landscape—and pollute the air. Focal points in Kentucky include the following areas: Ashland-Ironton-Huntington, Maysville, Cincinnati-Newport-Covington, Louisville-New Albany-Jeffersonville, Henderson-Owensboro-Evansville, Calvert City-Paducah.

In the United States, yearly, 142 million tons of pollutants are pumped into the air. Sixty percent of this total is due to motor vehicles, 30 percent to industries and powerplants, and about 10 percent to space heating and refuse disposal. Efforts at control of these sources are being made, although at present these efforts are in a considerable state of flux.

One of the sources of confusion lies in the definition of the term "smog." Authorities now seem to agree that what they call "photochemical smog"—as seen classically in the Los Angeles area—is one type, but not the only type, of air pollution. It is thought to be due to the interaction of oxidants and certain hydrocarbons (such as found in auto exhaust) under the influence of sunlight. On the other hand, the so-called "London" or "Donora" smog is characterized by a high content of smoke, sulfur compounds, and fly ash in a coal-burning, cold or foggy area. The former is thought to be less medically dangerous, at least in the short term, than the latter.

Anyone who has bought a new car since 1963 has had PCV, or Positive Crankcase Ventilation, working for him. This system consumes the fuel-air "blowby" that used to collect in the crankcase area and be vented overboard; such "blowby" accounted for up to 30 percent of the engine's hydrocarbon pollution.

All 1968 cars have, in addition, a system of exhaust emission control—usually a belt-driven pump which injects fresh air into the exhaust manifold in a regulated amount, thereby further oxidizing the remaining partially burned exhaust hydrocarbons to carbon dioxide and water. This type of system will reduce hydrocarbon emissions by 60 percent and carbon monoxide emissions by 50 percent. This is good, and considerably better than no controls at all, but the population of this country is increasing at the rate of four million per year (mostly in cities) and we're producing new cars at more than twice that rate—over nine million per year.

Control of contaminants from industrial sources has cost industry many millions of dollars. Gases can be washed out by "scrubbers", absorbed on charcoal, or burned to harmless byproducts. Particles can be filtered, electronically precipitated, or even centrifuged. The cost varies from $0.10 per cubic foot per minute of air handled up to $10 per cubic foot in certain cases. A single precipitator for a power plant stack may cost well over $1 million. Regional control commissions, with rules and the power to enforce them, are obviously necessary in this field. If control standards can be applied equally to all similar industries, they can all still competitively survive—but the cost will be, of course, passed on to the consumer (as is the case with federal regulations and the automobile control devices).

Strict medical standards of air purity are, as you might imagine, hard to come by, and the debate, even among the medical profession, about the relative hazards of various types of pollution is intense. Alton Ochsner, M.D., for instance in a recent column re-emphasizing the carcinogenic potential of cigarette smoking, says of urban air pollution, "It is unpleasant and costly since it besmudges many things, but is it really hazardous?" Other authorities, citing urban vs. rural cancer rates, quickly replied that it certainly appears to be so. All are agreed that dirty air is, however, physically undesirable at the very least, as well as economically and esthetically depressing. The federal government, under its Air Quality Act of 1967, has empowered HEW to spend $428 million in the next three years seeking solutions. Kentucky has an Air Pollution Control Program; many areas in the state have local or regional programs.

We should, as physicians, taxpayers, and citizens, be knowledgeable in this field, and offer what help we can to those interested in establishing guidelines or regulations. Any comments or suggestions you may have concerning this subject will be welcomed here at KMA.

WALTER I. HUME, JR., M.D.

Report Of The Health Manpower Commission

IN RECENT months physicians have become increasingly aware of the potential that the Regional Medical Programs and the Comprehensive Health Planning Act have for effecting the form of medical practice. A new document has only recently been released which may prove to have considerable influence over the system of medical practice in this country. This document is the Report of the National Advisory Commission on Health Manpower.

Early in the Report it is stated that there is a crisis in American health care today and this crisis not only involves number of health personnel available but also the system of health care. The members of the Commission state that they have put the needs of the patient first in developing their recommendations. No one would argue with putting the needs of the patient first but there are differences of opinion as how best to meet these needs.

Some of the statistics released in the Report are of interest. For example, the Report states that less than two percent of today's medical graduates go into general practice. It is stated that only 75 percent of the available positions in approved intern and residency programs are now filled. The data concerning foreign medical graduates indicates that about 7,000 graduates of foreign medical schools enter the United States each year. At the present time there are more than 40,000 foreign medical graduates in the United States and this makes up 14 percent of the active physicians in the country.

It is the recommendation of the Commission to expand the capacity of the existing medical schools and to continue to develop new ones. The same recommendation is made in regard to what is considered to be a shortage of dentists. With the shortage of nurses the situation is somewhat different in that there are more places available in nursing schools than there are candidates to fill them. It is estimated that there are between 500,000 and 600,000 qualified nurses in the country who are not active in the profession. Methods of attracting some of these nurses back to either full or part time active duty remain to be developed.

For the section of the Report having to do with the quality of medical care certain studies are used to indicate that patients in hospitals, particularly community hospitals, sometimes do not receive optimal care as judged by expert consultants. As a result of this conclusion the Commission recommends that professional societies and state governments should explore the possibility of periodic relicensing of physicians and other health professionals. It is stated that relicensure could be granted either upon certification of acceptable performance in continuing education programs or upon the basis

of challenge examinations in the practitioner's specialty.

Along this same line the Commission reviews some of the present methods of monitoring patient care such as the work of the Joint Commission on Accreditation of Hospitals, county society grievance committees and hospital utilization review committees. The Report recommends that professional societies, insurance organizations and government should extend the development and effective use of a variety of peer review procedures in maintaining high quality health and medical care.

Other parts of the Report have to do with additional requirements of training for foreign medical graduates, research and development in the area of emergency medical care and more responsible and effective use of military medical manpower. In the section having to do with improving hospital organization and management the Report recommends that medical and hospital associations should jointly explore means to increase the physicians' responsibility for the successful and economical management of hospital operations. It recommends the placing of physicians on hospital boards which the Kentucky Medical Association has gone on record of favoring.

One of the recommendations of the Commission that could have a major effect on health care in the future has to do with the creation of a Council of Health Advisers. The council would be composed of nongovernment experts and would have much of the responsibility of originating and coordinating government efforts in the health care area. The reports of such a council would be made to the President and the public through the Secretary of Health, Education, and Welfare.

Chairman of the National Advisory Commission on Health Manpower was Mr. J. Irwin Miller of Columbus, Indiana. There were 14 additional members which included four university presidents, a newspaper publisher, a banker, a medical school dean, a labor leader, a consultant in a large clinic, the president of The Commonwealth Fund, president of the Brookings Institution, a university vice-president, a faculty member of a school of public health and the president-elect of the American Medical Association. There is much in the Report that is controversial and physicians will need to become familiar with its contents as it is certain to receive close attention by those in and out of government that have to do with health matters.

WALTER S. COE, M.D.

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dverse Reactions: Idiosyncrasy, such as excitement, angover, or pain, may appear. Hypersensitivity reactions occur in some patients, especially in those with asthma, urticaria, or angioneurotic edema.

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It is the responsibility of the American Medical Association, as the representative of the American medical profession, to continue to foster the advancement of medical science and the health of the American people.

Its continuing purposes are to meet this responsibility through the following means:

1. By encouraging the further development of medical knowledge, skills, techniques and drugs; and by maintaining the highest standards of practice and health care.

2. By creating incentives to attract increasing numbers of capable people into medicine and other health-care professions.

3. By advancing and expanding the education of physicians and other groups in the health-care field.

4. By motivating skilled physicians who have the art of teaching to apply themselves to developing new generations of excellent practitioners.

5. By fostering programs that will encourage medical and health personnel to serve voluntarily in the areas of need for medical care.

6. By developing techniques and practices that will moderate the costs of good medical and health care.

7. By seeking out and fostering means of making all health-care facilities — physicians' offices, hospitals, laboratories, clinics and others — as efficient and economical as good medical practice and attention to human values will permit.

8. By combining the utilization of the latest knowledge for prevention and treatment with the vital healing force of the physician's personal knowledge of and devotion to his patient.

9. By maintaining the impetus of dedicated men and women in providing excellent health care by preserving the incentives and effectiveness of unshackled medical practice.

10. By maintaining the highest level of ethics and professional standards among all members of the medical profession.

11. By continuing to provide leadership and guidance to the medical profession of the world in meeting the health needs of changing populations.

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Use Enduron as a basic therapy in patients with mild to moderate hypertension. A single 5-mg. tablet each day is ample in most cases.

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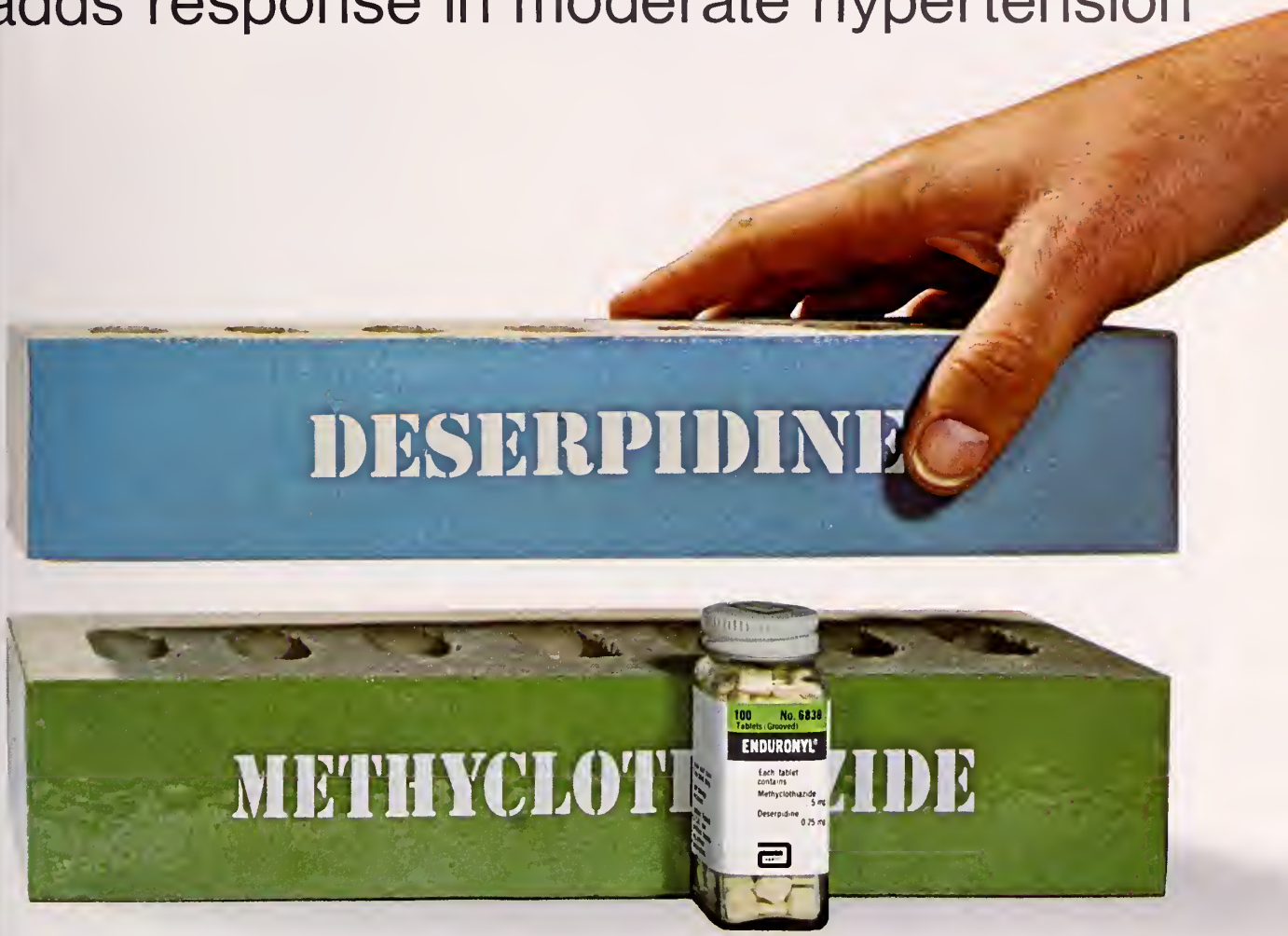
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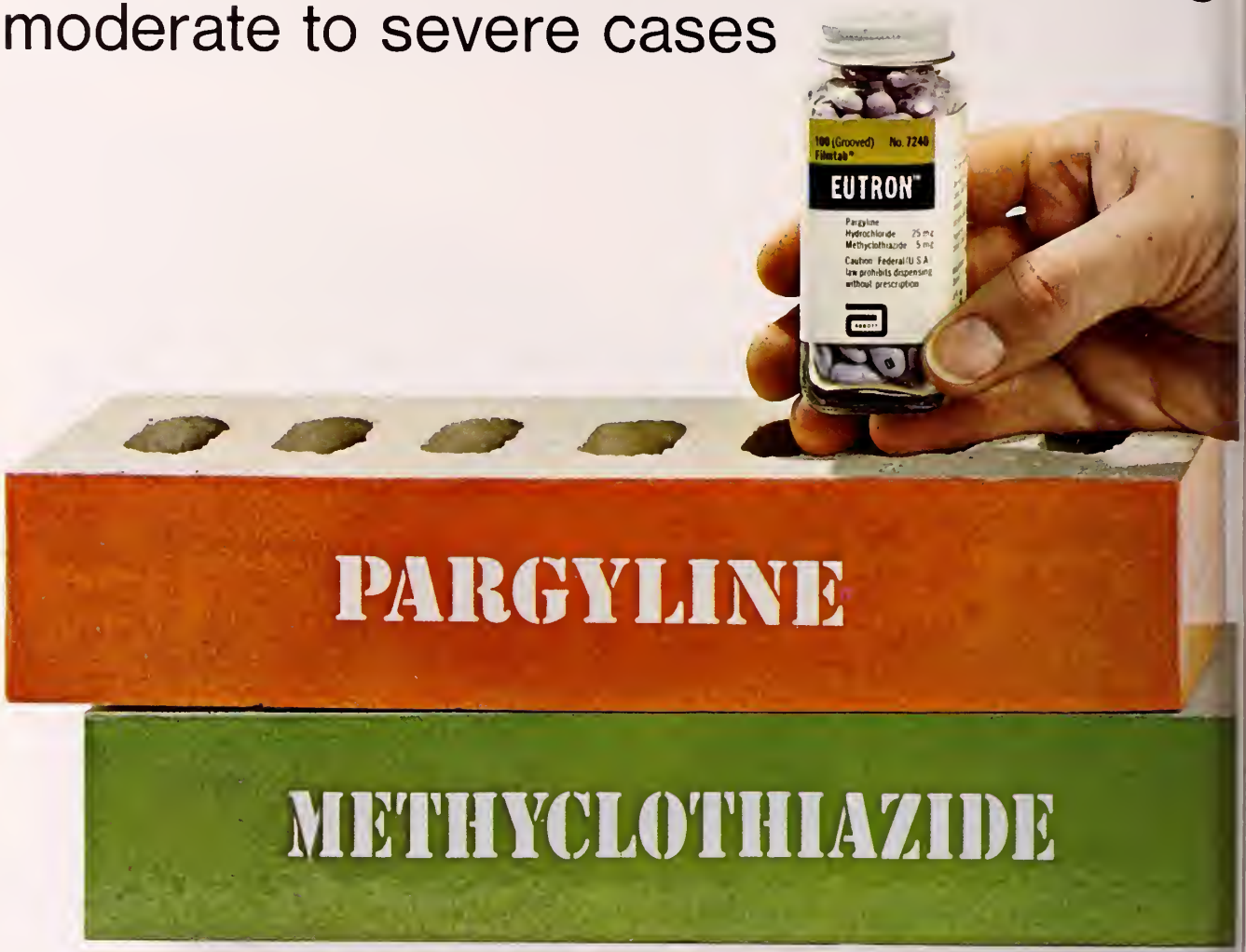
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Contraindications: Sensitivity to thiazides; severe renal disease (except nephrosis) or shutdown; severe hepatic disease or impending hepatic coma (hepatic coma due to hypokalemia has been reported in patients on thiazides). Do not use Enduronyl in severe mental depression, suicidal tendencies, active peptic ulcer, or ulcerative colitis.

Warnings: Consider possible sensitivity where there is history of allergy or asthma. If added potassium is indicated, dietary supplementation is recommended. Reserve enteric-coated potassium tablets for cautious use only when necessary, as they may induce serious or fatal small bowel lesions (stenosis with or without ulceration), cause obstruction, hemorrhage, and perforation often requiring surgery; discontinue them immediately if abdominal pain, distention, nausea, vomiting, or g.i. bleeding occurs. Neither Enduron nor Enduronyl contains added potassium.

Precautions: Use thiazides cautiously in severe renal dysfunction, impaired hepatic function or progressive liver disease; also in pregnancy (bone marrow depression, thrombocytopenia, and altered carbohydrate metabolism have been reported in certain newborn). In surgery, thiazides may reduce response to vasopressors, and increase response to tubocurarine. Antihypertensive response may be enhanced following sympathectomy. Watch for electrolyte imbalance (e.g., hyponatremia) in all patients. In hypokalemia (especially in digitalized patients) give supplemental potassium. In hypochloremic alkalosis, give supplemental chloride.

Use rauwolfias with caution in patients with history of peptic ulcer. Rauwolfias with anesthetics may produce hypotension and bradycardia. Discontinue Enduronyl two weeks before elective surgery. Consider vagal blocking agents during emergency surgery. In epilepsy, adjust anticonvulsant dosage. In electroshock, shorten stimulus strength and duration. In occasional patients with depressive tendencies, rauwolfias may precipitate severe mental depression that usually disappears when drug is stopped.

Adverse Reactions: Thiazide reaction include blood dyscrasias (thrombocytopenia with purpura, agranulocytosis, aplastic anemia); elevation of BUN, serum uric acid or blood sugar; anorexia, nausea, vomiting, diarrhea, headache, dizziness, paresthesia, weakness, skin rash, photosensitivity, jaundice, symtomatic gout, and pancreatitis. Cutaneous vasculitis in the elderly has been reported with other thiazides. Adverse effects with deserpidine are qualitatively similar to those with reserpine, but their incidence is lower. These include nasal stuffiness, abdominal cramps or diarrhea, nausea, headache, weight gain, reduced libido and potency, peptic ulcer aggravation, epistaxis, skin eruption, asthma in susceptible patients, electrolyte imbalance, excessive salivation, and a reversible Parkinson's syndrome. Excessive drowsiness, fatigue, weakness, and nightmares may signal mental depression. Thrombocytopenia, purpura, and a symptom manifested by dull sensorium, deafness, uveitis, glaucoma, and optic atrophy are rare allergic reactions to other rauwolfias. Hypotension from antihypertensive agents may precipitate angina attacks in susceptible individuals. Usually adverse reactions disappear when drug is withdrawn.

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Each tablet contains Pargyline Hydrochloride 25 mg. with Methyclothiazide 5 mg.

Indications: For treatment of patients with moderate to severe hypertension, especially those with severe diastolic hypertension. Not recommended for patients with mild or labile hypertension amendable to therapy with sedatives and/or thiazide diuretics alone. It is desirable to establish the dosage of Eutron by administering component drugs separately.

TM-TRADEMARK

Contraindications: Pheochromocytoma, advanced renal disease, increasing renal dysfunction, paranoid schizophrenia and hyperthyroidism. Hepatic coma has been reported as consequence of hypokalemia with thiazide therapy. Until further experience is gained not recommended for patients with malignant hypertension, children under 12, or pregnant patients.

Concomitant use of the following is contraindicated: other monoamine oxidase inhibitors; parenteral forms of reserpine or guanethidine; sympathomimetic drugs; foods high in tyramine such as cheese; imipramine and amitriptyline, or similar antidepressants; methyldopa. 2 week interval should separate therapy and use of these agents.

Methyclothiazide is contraindicated in patients with known sensitivity to thiazides.

Warnings: Pargyline hydrochloride is a monoamine oxidase inhibitor. Warn patients against eating cheese, and using alcohol, proprietary drugs or other medication without the knowledge of the physician. When indicated, alcohol, narcotics (meperidine should be avoided), antihistamines, barbiturates, chloral hydrate, and other hypnotics, sedatives, tranquilizers, or caffeine, may be used cautiously in reduced dosage. In emergency surgery ¼ to ⅕ the usual dose of narcotics, analgesics, and other premedications should be used avoiding parenteral administration where possible. Carefully adjust dose of anesthetics to response of patient. Withdraw pargyline two weeks before elective surgery.

Warn patients about the possibility of postural hypotension. Those with angina or coronary artery disease should not increase physical activity with an improvement in well being. Pargyline may lower blood sugar.

Avoid use of enteric-coated potassium tablets, as these may induce serious or fatal small-bowel lesions consisting of stenosis with or without ulceration. These small-bowel lesions have caused obstruction, hemorrhage and perforation frequently requiring surgery. Medication should be discontinued immediately if abdominal pain, distension, nausea, vomiting or GI bleeding occurs. These products contain no added potassium salts and if added potassium intake is desired, dietary supplementation is recommended. Coated potassium tablets should be reserved for cautious use when adequate dietary supplementation is impractical. In patients with a history of allergy or asthma the possibility of sensitivity reactions should be considered.

Precautions: Measure blood pressure while patient is standing to determine antihypertensive effect. Use with caution in hyperactive or hyperexcitable persons. Such persons may show increased restlessness and agitation. Withdraw drug during acute febrile illness. Watch patients with impaired renal function for increasing drug effects or elevation of BUN and other evidence of progressive renal failure; withdraw drug if such alterations persist and progress. Use with caution in patients with liver disease. As with all new drugs, complete blood counts, urinalyses, and liver function tests should be performed periodically. With prolonged therapy, examine patients for change in color perception, visual fields and fundi. Also reported have been: blood dyscrasias including thrombocytopenia with purpura, agranulocytosis and aplastic anemia; elevations of BUN, serum uric acid, or blood sugar. Symptomatic gout may be induced. In surgical patients thiazides may reduce response to vasopressors and increase response to tubocurarine.

Adverse Reactions: Pargyline may be associated with orthostatic hypotension. Mild constipation, slight edema, dry mouth, sweating, increased appetite, arthralgia, nausea and vomiting, headache, insomnia, difficulty in micturition, nightmares, impotence, delayed ejaculation, rash, and purpura have been encountered with pargyline. Hyperexcitability, increased neuromuscular activity (muscle twitching) and other extrapyramidal symptoms have been reported in a few patients with reduced cardiac reserve.

During intensive or prolonged therapy, guard against hypochloremic alkalosis and hypokalemia (especially the latter if patient is on digitalis). Observe all patients for signs of hyponatremia ("low salt" syndrome).

Reported thiazide reactions also include anorexia, nausea, vomiting, diarrhea, headache, dizziness, paresthesia, weakness, skin rash, photosensitivity, jaundice, and pancreatitis. Nocturia has been observed with the combination.

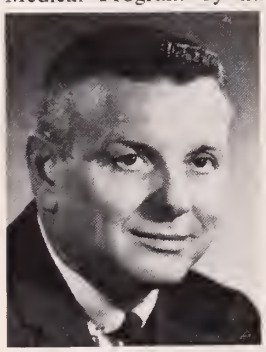
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ABBOTT

ORGANIZATION SECTION

OVRMP Panel Discussion To Feature Outstanding Personalities At KMA Interim Meeting Opening Session April 17

A panel discussion of the Ohio Valley Regional Medical Program by national and local authorities will be the feature presentation of the opening session of the 1968 KMA Interim Meeting April 17 at the Statler Hilton Motel, Covington. A dinner will precede the panel discussion.



Mr. Wozar

The panel moderator will be James B. Holloway, Jr., M.D., Lexington, chairman of the KMA Hospital Committee since 1958 and a member of the OVRMP Council, according to George F. Brockman, M.D., KMA president.

Members of the panel will include Robert Q. Marston, M.D., Bethesda, Md., director of the National Heart, Cancer and Stroke Program and assistant director of the National Institutes of Health; Louis Wozar, Dayton, Ohio, chairman of the OVRMP Council and president of the Tait Manufacturing Co.; and Walter I. Hume, Jr., M.D., Louisville, chairman of the KMA Medical Education Committee.

Guests of the Association scheduled to appear on the program the morning of April 18 include Francis Land, M.D., Washington, D.C., administrator of the Title XIX Medical Welfare Program; Blair J. Henningsgaard, M.D., Astoria, Oregon, chairman of the AMPAC Board; and Richard S. Wilbur, M.D., San Francisco, president of the California Blue Shield.

At the luncheon session closing the Interim Meeting April 18, the featured speaker will be Philip R. Lee, M.D., Washington, D.C., secretary for medical affairs in the Department of Health, Education and Welfare.

Other events planned during the Interim Meeting include meetings of the KMA Board of Trustees and the Woman's Auxiliary and a new member Orientation Program.

Doctor Marston, a 1947 graduate of the Medical College of Virginia, began service in his present capacity in 1966. Prior to his affiliation wth the National Institutes of Health he was vice chancellor and dean of the School of Medicine for the University of Mississippi. He is a member of the American Federation for Clinical Research, the Society for Experimental Biology and Medicine, the American Association for the Advancement of Science, and the author of numerous scientific articles.



Doctor Marston



Doctor Holloway

Mr. Wozar, an active participant in many Dayton community activities, is a member of the Board of Trustees of the Hospital Planning Council of the Greater Miami Valley and a member of the Board of Directors of the Mental Health Association of Montgomery County. He is the recipient of numerous civic awards including the 1964 "Citizen's Legion of Honor Award" of the President's Club of Dayton and two awards from the Boy Scouts of America.

Tenth Trustee District To Meet February 13 in Lexington

George F. Brockman, M.D., KMA president, will be the featured speaker at the annual dinner meeting of the Tenth KMA Trustee District Tuesday, February 13, according to Andrew M. Moore, M.D., Lexington, trustee for the district.

The meeting will begin at 5:30 p.m. at the Imperial House, Lexington. The Tenth District includes Fayette, Jessamine and Woodford counties and all physicians are invited to attend, Doctor Moore said.

Doctor Brockman will discuss controversial items acted upon at the 1967 meeting of the KMA House of Delegates. Fred C. Rainey, M.D., Elizabethtown, chairman of the Committee on Legislative Activities for State Affairs, will share the program with Doctor Brockman. Doctor Rainey will discuss current action of the 1968 General Assembly which is now in session.



The Statler-Hilton Motel (formerly the Lamplighter) will be the scene of the 1968 KMA Interim Meeting April 17 and 18 in Covington. The motel, located just 10 minutes from the Greater Cincinnati Airport, has excellent facilities for the two-day session.

Seventh KMA Trustee District To Meet in Shelbyville

Physicians and their wives in the Seventh KMA Trustee District are invited to the annual dinner meeting at 7 p.m. February 14 at Science Hill Restaurant, Shelbyville, according to Donald Chatham, M.D., Shelbyville, trustee for the district.

Guest speakers at the meeting will be KMA President George F. Brockman, M.D., Greenville, and Hoyt D. Gardner, M.D., Louisville, chairman of the Committee on Legislative Activities for National Affairs.

Doctor Brockman will discuss the trustee redistricting issue and other matters of interest to the Tenth District. Doctor Gardner, who has been attending the General Assembly in Frankfort, will report on the status of current legislation there.

AMA, KMA Praise PAC Movement; Urge Continuing Support

Vigorous support of the PAC movement was again voiced by both the AMA and the KMA House of Delegates during 1967.

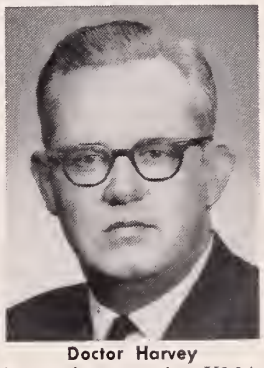
The AMA at its Houston meeting adopted a resolution expressing gratification for the good work of the American Medical Political Action Committee and that of the state committees.

A Jefferson County resolution adopted at the KMA House of Delegates meeting last September praised the good work of our state Political Action Committee and stressed the need for continued support.

John C. Quertermous, M.D., Murray, chairman of the Board of Directors of KEMPAC, expressed gratification at the candidate support in Kentucky and urged all KMA members to pay their 1968 dues as early as possible. He pointed out that the earlier the support can be given to Congressional candidates in the all important 1968 election, the more effective it would be.

Governor Appoints Dr. Harvey To State Board of Health

Daryl P. Harvey, M.D., Glasgow, was recently appointed to the State Board of Health by Governor Louie B. Nunn. Doctor Harvey succeeds J. F. VanMeter, M.D., Lexington, whose one-year term on the Board expired December 31.



Doctor Harvey

The statute provides that the governor shall appoint one from three nominees selected by the KMA Board of Trustees.

Doctor Harvey, who is an alternate delegate from KMA to the AMA, is serving on the KMA Legislative Committee and has been active in KEMPAC. He is a past president and member of the Board of Directors of the Kentucky Academy of General Practice.

Awards Nominations Accepted At KMA Interim Meeting

Nominations for recipients of KMA's three top awards will be accepted at the 1968 Interim Meeting, according to Richard F. Grise, M.D., Bowling Green, chairman of the Awards Committee.

The three awards, which are given at the KMA Annual Meeting, are the Distinguished Service Medal Award, Outstanding General Practitioner and the R. Haynes Barr Award. The committee will meet at the Interim Meeting at a reserved table during the April 18 luncheon and will accept nominations at that time.

Members of the Awards Committee are Doctor Grise, William A. Blodgett, M.D., Louisville, Frank L. Duncan, M.D., Monticello, C. Wayne Franz, M.D., Ashland, and Joseph Keith, Jr., M.D., Lexington.

Ky. Chairmen Named at SMA Mtg.

Two Kentucky physicians were elected Section chairmen during the meeting of the Southern Medical Association in Miami Beach, Fla., November 13-16.

Joseph B. Parker, Jr., M.D., Lexington was named chairman-elect of the Section on Neurology and Psychiatry, and J. B. Marshall, M.D., Louisville, was named chairman of the Section on Gynecology.

Dr. Wilson Among Guests To Speak At Lexington Clinic Conference

N. Robert Wilson, M.D., Rochester, Minnesota, a consultant in child and adolescent psychiatry at the Mayo Clinic, will be one of four guest speakers at the Thirteenth Annual Lexington Clinic Conference March 28. Doctor Wilson will discuss "Psychedelic Drugs."



Doctor Wilson

The theme of the Conference will be "Adolescent Medicine." Other guest speakers and their topics will be Sidney Olansky, M.D., Atlanta, Ga., "Syphilis Today,"; Ernst Jokl, M.D., Lexington, "Olympic Athletes"; and Col. Frederick C. Biehusen, M.D., Washington, D.C., "Adolescent Medicine—The Rules of the Game."

Lexington Clinic physicians appearing on the program include Eugene Todd, Jr., M.D., moderator of the morning session; James W. Bard, M.D., Conference program chairman; Noble T. MacFarlane, M.D., Carl T. Evans, M.D., William Underwood, M.D., George R. Park, M.D., Ronald D. Hamilton, M.D., Richard D. Floyd, M.D., Peter H. Jones, M.D., Wilk O. West, M.D., and James L. Stambaugh, M.D., moderator of the afternoon session.

Doctor Wilson, a 1957 graduate of the Stanford University School of Medicine, is chief of service of the Rochester Methodist Hospital adolescent and college psychiatry hospital unit and has served as a psychiatric consultant at several Minnesota colleges.

Key Man Orientation Conference Held January 4 at Frankfort

The Committee on Legislative Activities was gratified that over 50 physicians and guests could attend the Key Man Orientation Conference January 4 in Frankfort in spite of the inclement weather. Hoyt D. Gardner, M.D., Louisville, is the Comittee's chairman for National Affairs and Fred C. Rainey, M.D., Elizabethtown, is chairman for State Affairs.

The morning session was devoted to an explanation of the Key Man System and Booklet. KMA President George F. Brockman, M.D., Greenville, ended the session with a talk on "Key Man Opportunities." Guest speaker for the luncheon was Gov. Louie B. Nunn.

The afternoon session, devoted to group discussions, was concluded with a talk by Robert E. Pennington, M.D., London, KMA past president. Doctor Pennington gave a penetrating view of the current legislative climate and made suggestions for effective participation by key men and physicians in influencing enactment of legislation in the public interest.

Are You Eligible To Vote May 28?

In order to be eligible to cast your ballot in the May 28 primary election, when party candidates for Congress and the U.S. Senate are nominated, you must be properly registered by March 29, according to Hoyt D. Gardner, M.D., Louisville, chairman of the KMA Legislative Committee for National Affairs.

Doctor Gardner and Fred C. Rainey, M.D., Elizabethtown, chairman for State Affairs, urge you to check your registration status and that of your family, staff and friends to be sure of eligibility to vote in this all-important election year.

Ky. Chap. AAP and CEC To Hold Pediatrics Symposium Feb. 28

A symposium on "Learning Disorders in Children", co-sponsored by the Kentucky Chapter of the American Academy of Pediatrics and the Child Evaluation Center of the U of L School of Medicine's department of pediatrics, has been scheduled Wednesday, February 28, at Stouffer's Inn, Louisville.

The program is acceptable for six (6) prescribed hours by the American Academy of Pediatrics, according to Bernard Weisskopf, M.D., director of the Child Evaluation Center.

Guest speakers will include Margaret Gianinni, M.D., professor of pediatrics at the New York Medical College, and Herbert Grossman, M.D., professor of pediatrics at the University of Illinois College of Medicine. Registration forms may be obtained from Doctor Weisskopf at the Center, 340 East Madison St., Louisville 40202.

Carl H. Fortune Lecture Planned

The first Carl H. Fortune lecture honoring Carl H. Fortune, M.D., Lexington, will be delivered at 11:45 a.m. March 28 as part of the program of the Thirteenth Annual Lexington Clinic Conference.

Col. Frederick C. Biehusen, M.D., chief of the pediatric service at Walter Reed Army Hospital, Washington, D.C., will give the lecture, according to James W. Bard, M.D., program chairman. Doctor Biehusen's topic will be "Adolescent Medicine—The Rules of the Game."

TB Testing Program Accelerated

An estimated 425,000 Kentucky school children will have received tuberculin tests by the end of the spring term in a drive that began in 1964, according to a recent release from the Kentucky TB and Respiratory Disease Association.

Medical teams at each of the state's six TB hospital districts have been conducting the tests under a program directed by M. Stuart Lauder, M.D., for the Kentucky Department of Health. The goal of the program is to raise a generation of children free of tuberculosis infection, the release stated.

Welcome . . .

to the

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KENTUCKY MEDICAL ASSOCIATION

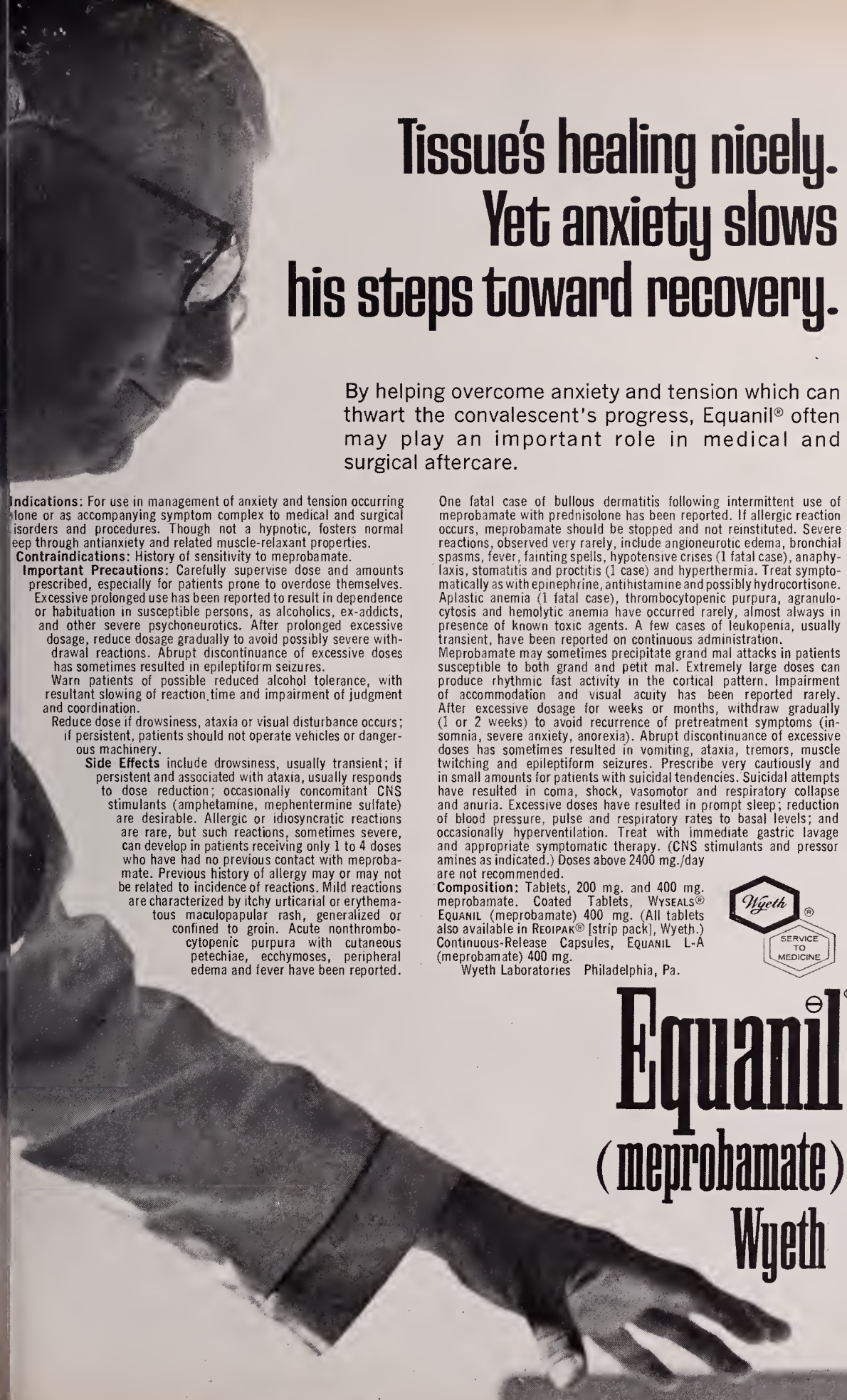
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Indications: For use in management of anxiety and tension occurring alone or as accompanying symptom complex to medical and surgical disorders and procedures. Though not a hypnotic, fosters normal sleep through antianxiety and related muscle-relaxant properties.

Contraindications: History of sensitivity to meprobamate.

Important Precautions: Carefully supervise dose and amounts prescribed, especially for patients prone to overdose themselves. Excessive prolonged use has been reported to result in dependence or habituation in susceptible persons, as alcoholics, ex-addicts, and other severe psychoneurotics. After prolonged excessive dosage, reduce dosage gradually to avoid possibly severe withdrawal reactions. Abrupt discontinuance of excessive doses has sometimes resulted in epileptiform seizures.

Warn patients of possible reduced alcohol tolerance, with resultant slowing of reaction time and impairment of judgment and coordination.

Reduce dose if drowsiness, ataxia or visual disturbance occurs; if persistent, patients should not operate vehicles or dangerous machinery.

Side Effects include drowsiness, usually transient; if persistent and associated with ataxia, usually responds to dose reduction; occasionally concomitant CNS stimulants (amphetamine, mephentermine sulfate) are desirable. Allergic or idiosyncratic reactions are rare, but such reactions, sometimes severe, can develop in patients receiving only 1 to 4 doses who have had no previous contact with meprobamate. Previous history of allergy may or may not be related to incidence of reactions. Mild reactions are characterized by itchy urticarial or erythematous maculopapular rash, generalized or confined to groin. Acute nonthrombocytopenic purpura with cutaneous petechiae, ecchymoses, peripheral edema and fever have been reported.

One fatal case of bullous dermatitis following intermittent use of meprobamate with prednisolone has been reported. If allergic reaction occurs, meprobamate should be stopped and not reinstituted. Severe reactions, observed very rarely, include angioneurotic edema, bronchial spasms, fever, fainting spells, hypotensive crises (1 fatal case), anaphylaxis, stomatitis and proctitis (1 case) and hyperthermia. Treat symptomatically as with epinephrine, antihistamine and possibly hydrocortisone. Aplastic anemia (1 fatal case), thrombocytopenic purpura, agranulocytosis and hemolytic anemia have occurred rarely, almost always in presence of known toxic agents. A few cases of leukopenia, usually transient, have been reported on continuous administration.

Meprobamate may sometimes precipitate grand mal attacks in patients susceptible to both grand and petit mal. Extremely large doses can produce rhythmic fast activity in the cortical pattern. Impairment of accommodation and visual acuity has been reported rarely. After excessive dosage for weeks or months, withdraw gradually (1 or 2 weeks) to avoid recurrence of pretreatment symptoms (insomnia, severe anxiety, anorexia). Abrupt discontinuance of excessive doses has sometimes resulted in vomiting, ataxia, tremors, muscle twitching and epileptiform seizures. Prescribe very cautiously and in small amounts for patients with suicidal tendencies. Suicidal attempts have resulted in coma, shock, vasomotor and respiratory collapse and anuria. Excessive doses have resulted in prompt sleep; reduction of blood pressure, pulse and respiratory rates to basal levels; and occasionally hyperventilation. Treat with immediate gastric lavage and appropriate symptomatic therapy. (CNS stimulants and pressor amines as indicated.) Doses above 2400 mg./day are not recommended.

Composition: Tablets, 200 mg. and 400 mg. meprobamate. Coated Tablets, WYSEALS® EQUANIL (meprobamate) 400 mg. (All tablets also available in REDIPAK® [strip pack], Wyeth.) Continuous-Release Capsules, EQUANIL L-A (meprobamate) 400 mg.

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Medicare Law Changes Outlined In Letter to Ky. Physicians

On January 8 the Metropolitan Life Insurance Company issued a letter announcing recent changes in the Medicare law to all Kentucky physicians, according to Paul J. Parks, M.D., Bowling Green, chairman of the Advisory Committee on Title XVIII.

Eleven provisions now in effect and two provisions which will go into effect April 1 are explained in detail in the letter. We urge you to read it carefully and to direct any questions you may have to Mr. Donald Smith, Metropolitan Life Insurance Company Medicare Office, 1218 Harrodsburg Road, Lexington 40504.

Also included with the letter is information entitled "Important Changes in Claiming Part B Benefits" which will be mailed to the general public covered by Medicare at a later date. We urge that you also read this material. Metropolitan also intends to issue a bimonthly Medicare Newsletter to all physicians this year.

KMA Reports 1968 Officers Of Co. Medical Societies

The following list of officers and delegates of county medical societies for 1968 had been received by the KMA membership department as of January 20:

Boyd
- President: G. B. Reams, M.D., Ashland
- Vice President: Okey H. Sanford, M.D., Ashland
- Secretary: Keith Martin, M.D., Ashland
- Treasurer: Wiley Kozee, M.D., Ashland
- Delegates to KMA: John Harrison, M.D., Ashland
  Max Wheeler, M.D., Ashland

Breathitt
- President: Robert E. Cornett, M.D., Jackson
- President-Elect: Price Sewell, Jr., M.D., Jackson
- Vice President: Price Sewell, Jr., M.D.
- Secretary-Treasurer: F. C. Lewis, M.D., Jackson
- Delegate to KMA: F. C. Lewis, M.D.
- Alternate: Price Sewell, Jr., M.D.

Bullitt
- President: Patrick J. Murphy, M.D., Lebanon Junction
- President-Elect: R. Stephen Bower, M.D., Mt. Washington
- Secretary: R. Stephen Bower, M.D.
- Delegate to KMA: W. Bruce Hamilton, M.D., Shepherdsville
- Alternate: Patrick J. Murphy, M.D.

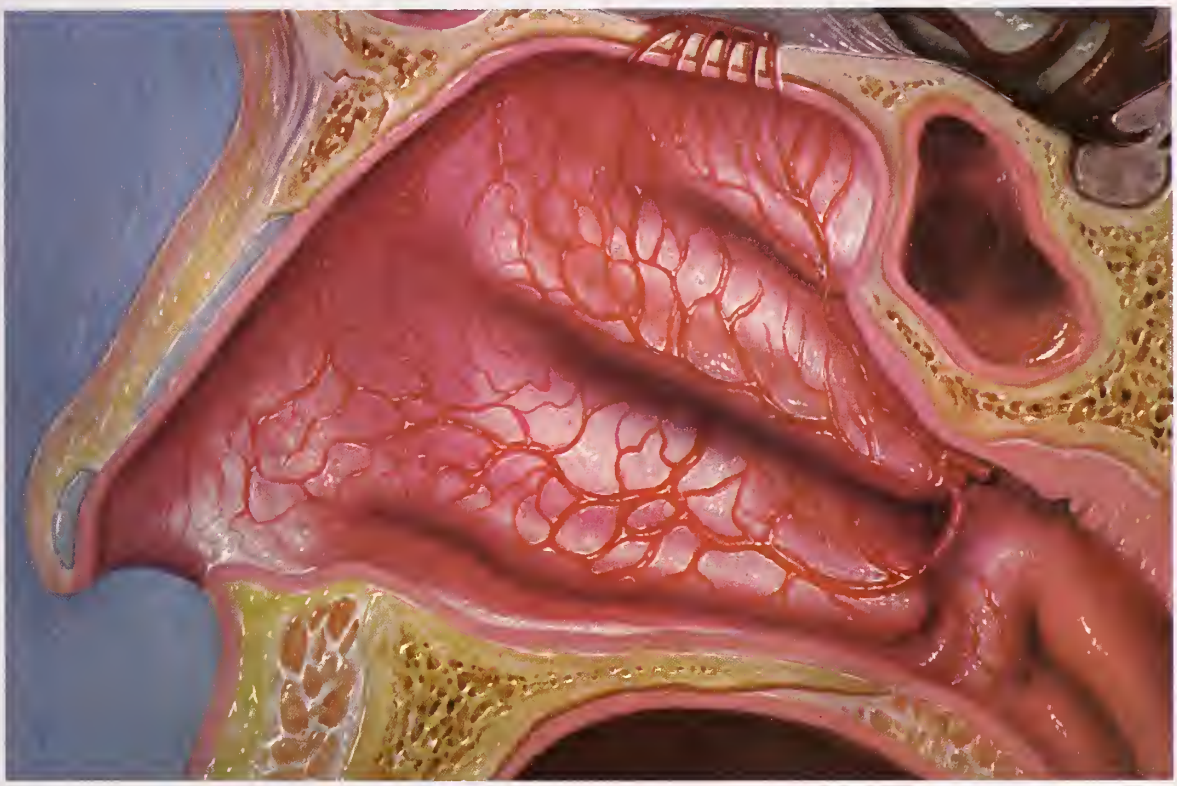
Hickman
- President: C. J. Mills, M.D., Clinton
- Secretary: H. E. Titsworth, M.D., Clinton
- Delegate to KMA: C. J. Mills, M.D.
- Alternate: H. E. Titsworth, M.D.

(Continued on page 197)

winter 1968

DORSEY Season

A journal within a journal published quarterly in the interests of better medicine by Dorsey Laboratories, a division of The Wander Company, Lincoln, Nebraska 68501. Address communications to Keith W. Sehnert, M.D., Medical Director.





this issue: the cold in pregnancy...

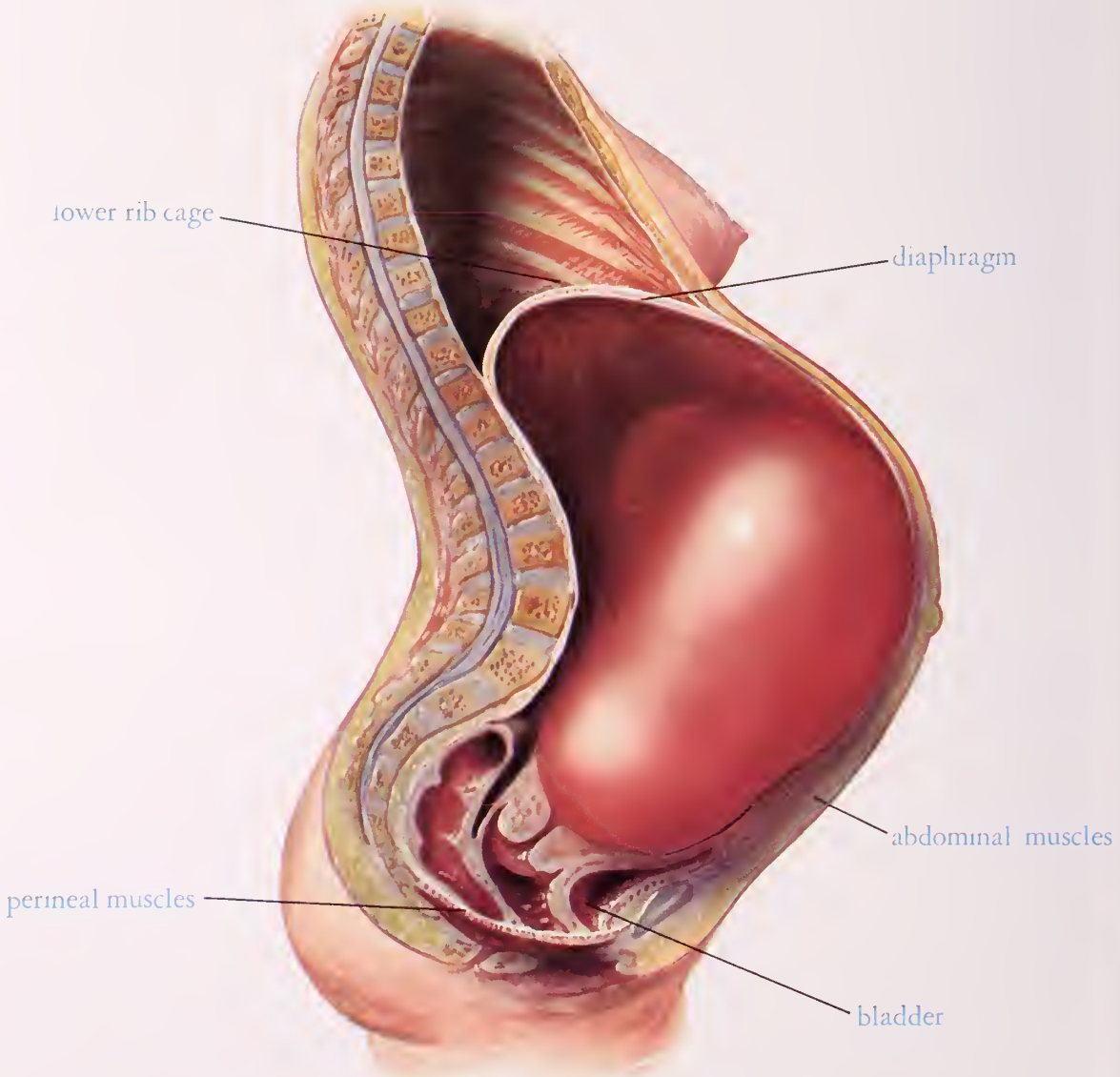
The cold in pregnancy

Frederick W. Goodrich, Jr., M.D.
Senior Obstetrician and Gynecologist, Lawrence and Memorial Hospital, New London, Connecticut

Since pregnancy and the common cold are both ubiquitous, it is not surprising that they often occur at the same time in the same patient. Incidence figures are hard to come by, but the chances are very good that any given pregnant woman will have a cold at some time during the nine months of her gestation. When she does, she will tell you that it is the worst cold she ever had. It seems to last longer and the symptoms are more distressing than they are in the non-pregnant.

For purposes of this discussion, the common cold considered to be the well-known symptom comple which includes sore throat, stuffy nose, and a coug Febrile states or extension of the disease proce into the lower respiratory tree are not part of th common cold and will not be included in this di cussion.

The clinical picture of a cold in pregnancy can b confused by a long-known physiological phenom



ion. Kiesselbach's area in the nose (on the anterior part of the nasal septum above the intermaxillary bone) becomes engorged, apparently due to hyperemia induced by the increased estrogen level which accompanies pregnancy. The amount of congestion can vary in degree from woman to woman. Some have very little congestion, others will have occasional nosebleeds from this area, still others will have symptomatic congestion to the degree that they will complain of having a "chronic" or constant cold.

Less well recognized is the occurrence of this type of hyperemia in any part of the nasopharyngeal mucosa, again in varying degree. Such swelling often produces a postnasal drip which, the patient will state, is present only when she is pregnant. Patients who do not have symptomatic congestion ordinarily, will find that when they do get a cold, the symptoms last much longer than those of a cold usually do. Occasionally, this hyperemia is responsible for closure of the medial end of the Eustachian tube; such patients will complain of "plugging" of the ears. Inspection of the ear drum will show a depression which confirms the presence of Eustachian closure rather than wax in the canal which is the patient's diagnosis. Symptoms related to this physiological congestion are more apt to occur in heavier smokers or those who have a history of allergic rhinitis, just as are the symptoms of the common cold. And when the cold does occur in pregnancy, the symptoms are worse because of the underlying congestion.

The pregnant woman with a cold is miserable for two reasons, dependent somewhat on her parity and the length of her gestation. As parity increases, so also does the relaxation of the abdominal and perineal musculature. The uterus, lying against a slack abdominal wall, and bearing down on relaxed perineal muscles, acts like a piston when the patient coughs, sneezes, or even blows her nose, pushing down on the bladder. Stress incontinence during colds is almost the rule.

As the length of gestation increases, so does the size of the uterus. As it grows, it pushes the abdominal contents above it and elevates the diaphragm. This results eventually in a lateral displacement of the lower rib cage, often to a point at which the patient will complain of soreness in this area. If such a

(Concluded on following page)

From a continuing study on nasal congestion...



timed to work while your patient does

A study begun in 1966 by the Department of Otolaryngology, Greater Baltimore Medical Center, has accumulated evidence that documents the effectiveness of Triaminic's timed-release action in the treatment of nasal congestion.

With its balanced formulation of an oral nasal decongestant and two antihistamines, Triaminic effected partial or complete relief in more than 82% of the 85 subjects treated. Clearing nasal obstruction. Reducing turbinate swelling. Making breathing easier.

It's a comforting thing to know that Triaminic really works.

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Each timed-release tablet contains:

Phenylpropanolamine hydrochloride	50mg.
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Side effects: Occasional drowsiness, blurred vision, cardiac palpitations, flushing, dizziness, nervousness or gastrointestinal upsets. Precautions: The patient should be advised not to drive a car or operate dangerous machinery if drowsiness occurs. Use with caution in patients with hypertension, heart disease, diabetes or thyrotoxicosis.

(Advertisement)

patient has a cold, the coughing and sneezing will exaggerate this soreness. The diaphragmatic restriction caused by the enlarging uterus also makes breathing more difficult, particularly when the patient lies down. A cold compounds this difficulty.

Treating a cold in pregnancy requires two additional considerations. The patient should be told that the symptoms may last longer lest she become discouraged, and she should be reassured that the treatment will not damage the fetus. Although there are still some women who seem blissfully ignorant regarding matters of health (and these need to be cautioned not to take medication recommended by friends), most of our maternity patients are aware of the thalidomide tragedy. These women need constant reassurance that the symptoms of a cold can be treated, and that the medication is safe. Fortunately, many of the drugs which are of benefit have been in use long enough and widely enough so that such a statement can be offered. Occasionally one encounters a patient who is so anxious to avoid medication that she is extremely reluctant to take anything at all. Since cold is self-limited, it seems reasonable enough to give such a patient the choice and not to force drugs on her if she is obviously afraid of taking them.

The most distressing symptom of the common cold is the nasal congestion. This can be mitigated by the use of a decongestant which will help reduce the postnasal drip and the coughing caused by it. The kind of a cough which is described as a "tickling" in the throat and which is apt to occur when the patient goes to bed is usually due to nasopharyngeal congestion rather than inflammation in the lower respiratory tract.

There are many cough mixtures available. Most contain an antihistamine, a decongestant, and a cough "suppressant." Should cough suppression be desirable, it is important to remember not to use both a decongestant tablet and such a cough mixture as the patient would be getting a double dose of the decongestant. With some patients, the placebo effect of a cough syrup may be important and a liquid preparation might be substituted for an oral tablet.

For a sore throat, candy drops or lozenges at frequent intervals are soothing. It is not only unnecessary but unwise to use antibiotic lozenges or drops The use of antibiotics in an uncomplicated cold is contraindicated and should be scrupulously avoided

In summary, a cold in pregnancy is more severe and longer lasting. The treatment of the symptoms with local and systemic decongestants will make the patient more comfortable.

Apparently the cold is so common in pregnancy that it has received very little attention in the literature References are almost non-existent and the few which are available add little to the common knowledge, are out-dated, or are not helpful. Thus the usual bibliography is not appended.



Relieve his sniffles, her concern, and about half your phone calls. Tell her to get "The Orange Medicine"



Triaminic® syrup

Each teaspoonful (5 ml.) contains:

Phenylpropanolamine hydrochloride	12.5 m
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For nasal congestion you can bring quick, lasting comfort to your little patients with Triaminic Syrup. You may occasionally encounter these side effects: drowsiness blurred vision, cardiac palpitations, flushing, dizziness nervousness or gastrointestinal upsets. Precautions: the possibility of drowsiness should be considered by patients engaged in mechanical operations requiring alertness. Use with caution in patients with hypertension heart disease, diabetes, or thyrotoxicosis.

(Advertisement

(Continued from page 192)

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Vice President: Roy G. Wilson, M.D., Campbellsville
Secretary-Treasurer: W. B. Atkinson, M.D., Campbellsville

COUNTY SOCIETY REPORTS

McCracken

The regular monthly meeting of the McCracken County Medical Society was held at Boswell's Restaurant in Paducah December 20. Walter Johnson, M.D., Society president, announced that Joseph R. Miller, M.D., trustee for the First KMA Trustee District, had again proposed that the district meeting be held at the Paducah Country Club January 24. Doctor Johnson also announced that Winfield Stryker, MD., had been appointed the official representative of the Office of Economic Opportunity.

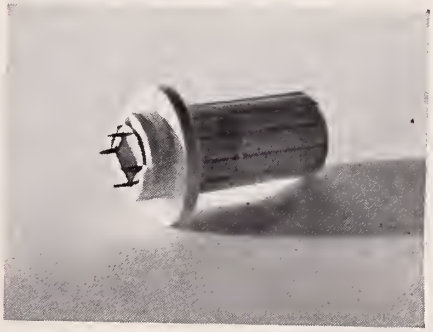
Following the announcements, the report of the Society's nominating committee was read and the following officers were elected for 1968:

W. Eugene Sloan, president; D. L. Boucher, M.D., vice president; Chester Blanton, M.D., secretary, Walker Turner, M.D., and Eli Khouri, M.D., members of the executive committee, Walter R. Johnson, M.D., delegate to KMA, and Glenn Noss, M.D., alternate delegate.

Members elected to the Public Health Committee were Winfield Stryker, M.D., Bill Hosbach, M.D., Louis Myre, MD., W. G. Burrow, M.D., Clarence Sullivan, M.D., and Ted Koss, M.D.

To fight TB-
find it first!

Make tuberculin testing routine
with every physical examination.



TUBERCULIN, TINE TEST
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Side effects are possible but rare: vesiculation, ulceration, or necrosis at test site. Contraindications: none, but use with caution in active tuberculosis. Available in 5's and 25's.

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Tandearil®, oxyphenbutazone, 100 mg. tablets

Indications: Osteoarthritis, rheumatoid arthritis, rheumatoid spondylitis, psoriatic arthritis, gout, painful shoulder (peritendinitis, capsulitis, bursitis and acute arthritis of that joint), acute superficial thrombophlebitis, severe forms of a variety of local inflammatory conditions. (In inflammatory conditions not involving prolonged or fatal disease, use only when severity of condition balances potential toxicity.)
The drug has no significant uricosuric action but is of value only in the treatment of acute gouty arthritis.
Contraindications: Edema; danger of cardiac decompensation, history or symptoms of peptic ulcer; renal, hepatic or cardiac damage; history of drug allergy; history of blood dyscrasia. The drug should not be given when the patient is senile or when other potent drugs are given concurrently.
Warning: Tandearil is an analog of phenylbutazone; sensitive patients may be cross-reactive. If coumarin-type anticoagulants are given simultaneously, watch for excessive increase in prothrombin time. Instances of severe bleeding have occurred. Pyrazole compounds may potentiate the pharmacologic action of sulfonylurea, sulfonamide-type agents and insulin. Carefully observe patients receiving such therapy. Use with great caution in the first trimester of pregnancy.
Precautions: Before prescribing, carefully select patients, avoiding those responsive to routine measures as well as contraindicated patients. Obtain a detailed history and a complete physical and laboratory examination, including a blood count. The patient should not exceed recommended dosage, should be closely supervised and should be warned to discontinue the drug and report immediately fever, sore throat, or mouth lesions (symptoms of blood dyscrasia); sudden weight gain (water retention); skin reactions; black or tarry stools or other evidence of intestinal hemorrhage, occur. Make regular blood counts. Discontinue the drug immediately and institute countermeasures if the white count changes significantly, granulocytes decrease, or immature forms appear. Use greater care in the elderly and in hypertensives.
Adverse Reactions: The most common are nausea, edema and drug rash. Swelling of the ankles or face may be minimized by with-

'Pain Break" for an osteoarthritic. Tandearil can ease it.

At 46, her knees still look good on the outside. But inside, there may be the familiar picture of osteoarthritis.



If aspirin doesn't help, Tandearil often will. Pain and stiffness begin to ease up in 3 or 4 days. You can often maintain response with a daily dose of only 1 or 2 tablets.

Of course, Tandearil is not for every osteoarthritic. Select your patients carefully and follow them in line with the Contraindications, Precautions, Warning, and Adverse Reactions listed below.

But for many aspirin-stubborn osteoarthritics, let Tandearil ease the unwelcome pain breaks of osteoarthritis.

Tandearil®
oxyphenbutazone

holding dietary salt, reduction in dosage or use of diuretics. In elderly patients and in those with hypertension the drug should be discontinued with the appearance of edema. The drug has been associated with peptic ulcer and may reactivate a latent peptic ulcer. The patient should be instructed to take doses immediately after meals or with milk to minimize gastric upset. Mild drug rashes frequently subside with reduction of dosage. However, rash accompanied by fever or other systemic reactions usually requires withholding medication. Purpuric rash has also been reported. Agranulocytosis or a generalized allergic reaction similar to a serum sickness syndrome may occur and require permanent withdrawal of medication. Stomatitis, salivary gland enlargement, vomiting, vertigo and languor may occur. Leukemia and leukemoid reactions have been reported. While not definitely attributable to the drug, a causal relationship cannot be excluded. Thrombocytopenic purpura and aplastic anemia may occur. Confusional states, agitation, headache, blurred vision, optic neuritis and transient hearing loss have been reported, as have hyperglycemia, hepatitis, jaundice, and several cases of anuria and hematuria. With long-term use, reversible thyroid hyperplasia may occur infrequently. Moderate lowering of the red cell count due to hemodilution may occur.

Dosage in Osteoarthritis: Initial: 3 to 6 tablets daily in divided doses. It is usually unnecessary to exceed 4 tablets daily. A trial period of 1 week is adequate to determine response; in the absence of a favorable response, discontinue. Maintenance: An effective level is often achieved with 1 or 2 tablets daily, do not exceed 4 daily. 6562-VI(B)R2

For complete details, please see full prescribing information.

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In Memoriam

BENJAMIN S. BELL, M.D.
Lexington
1936-1967

Benjamin S. Bell, M.D., 31, Lexington, director of research for the University of Kentucky Health Service and an instructor at the Medical Center, died December 26 at his home. Doctor Bell graduated from the University of Kentucky College of Medicine in 1965.

EDWARD A. McEVER, M.D.
Williamsburg
1901-1967

Edward A. McEver, M.D., 65, a Williamsburg physician, died December 12 at his home. Doctor McEver, a 1925 graduate of the University of Tennessee College of Medicine, had practiced in Williamsburg since 1948.

MARION W. PAGE, M.D.
Cuba
1881-1967

Marion W. Page, M.D., 86, a Graves County physician for 52 years, died December 25 at Murray Nursing Home. Doctor Page graduated from the University of Louisville School of Medicine in 1909.

EMORY L. SHIFLETT, M.D.
Louisville
1902-1968

Emory L. Shiflett, M.D., 65, a Louisville radiologist, died January 1 at Methodist Evangelical Hospital. Doctor Shiflett, who had practiced in Louisville since 1936, was a 1930 graduate of the University of Virginia School of Medicine. He was a member of the American College of Physicians, American College of Radiology and a founding member of World Medical Association.

ALFRED FRANK SMITH, M.D.
Georgetown
1893-1967

Alfred Frank Smith, M.D., 74, a retired Georgetown physician, died December 24 at Central Baptist Hospital, Lexington, after a short illness. Doctor Smith, a 1935 graduate of the University of Tennessee College of Medicine, had practiced in Georgetown for 30 years before his retirement.

Recent Trends in Family Planning

(Continued from page 155)

at Cornell University Medical College Symposium, *Medical World News,* June 30, 1967, p. 47.
11. *Study of Long Acting Injectable Medroxyprogesterone Acetate for Contraceptive Use,* Daniel R. Mishell, Jr., M.D., Moustafa El-Habashy, M.D. and Dean L. Meyer, M.D., U.C.-L. A. Medical School. Given at the American Association of Planned Parenthood Physicians Fifth Annual Meeting, April 3-4, 1967, Atlanta, Georgia.
12. Contraception, *Time Magazine,* April 7, 1967, pp. 78-84.
13. *A Program in Mass Family Planning for the Urban Indigent in a Charity Hospital,* Nicholas Wright, M.D., Joseph Swartwout, M.D., Atlanta, Georgia.
14. *An Evaluation of Changing Trends in Contraceptive Choice,* Carl W. Tyler, Jr., M.D., Jack C. Smith, M.S. and Donald L. Eddins, B.S from the Epidemiology Program, National Communicable Disease Center, Public Health Service, U.S. Department of Health, Education and Welfare, Atlanta, Georgia. Presented at the American Association of Planned Parenthood Physicians Fifth Annual Meeting, April 3-4, 1967, Atlanta, Georgia.
15. Family Planning: Experience at Two Seattle Hospitals, Denniston, G. C., Source—department of obstetrics and gynecology, University of Washington, Seattle. *Northwestern Medical Publication,* Seattle, 1966, 65-9/ 736-738. Tables 4.

MATERNAL MORTALITY PAGE

(Continued from page 145)

mately 2:15 AM the patient again became extremely irritable. Two hundred and fifty milligrams of Sodium amytal were given, and a spinal puncture was done. The opening pressure was 220 mm. and the fluid was clear. The blood pressure was now 65/40 and the patient was totally unresponsive with shallow respirations. She was noted for the first time to be clinically jaundiced and the liver edge was palpable to 5 centimeters below the right costal margin. Solucortef was now being given in doses of 500 mg every two hours, but the patient died at 3:30 AM on December 6, 1965. A terminal bilirubin was reported as 3.4 mg% on the one minute fraction and 10.1 mg% on the total. Permission for autopsy could not be obtained. The final clinical impression was that of postpartum hemorrhage with septic shock and septicemia. The terminal event was thought to be cor pulmonale and right heart failure with cerebral edema.

Comments

Management of ruptured membranes in a patient with an unfavorable cervix is certainly a controversial topic. The committee considered this a direct obstetric death with possible preventable factors in the management of the ruptured membranes in a grand multipara who would be considered a high-risk patient. It was suggested that pitocin stimulation on the day of admission may have been preferable to its first use on the following day.

The stimulation of labor for only 4½ hours was considered a half-way attempt, and if the induction attempt had been more vigorous, it might have resulted in earlier delivery. A question was raised concerning the hazards of vigorous stimulation in hospitals where the patient is not observed closely. Cases of ruptured uterus under such circumstances have often come to the attention of the committee.

John J. Sherman, M.D., and Frances R. Sherman, M.D., closed their practice in Martin on October 19, according to a recent newspaper announcement.

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KMA Announces New Members

Four Louisville physicians joined the Kentucky Medical Association recently, according to the records of the membership department as of January 20.

The new members are Edward Callahan, M.D., Herbert Dickstein, M.D., Mary L. Osborne, M.D., and John H. Wikman, M.D.

Immunization Booklet Revised

Copies of the revised booklet entitled "Immunization Information for International Travel, 1967-68 Edition," are now available at 40¢ per copy, according to a recent memorandum issued by the Department of Health, Education and Welfare. The booklet may be obtained from the Supt. of Documents, Government Printing Office, Washington, D.C., 20402.

Film on Smoking Available

The availability of a black and white, 16 mm. sound film entitled "Getting Through", which deals with cigarette smoking, has been announced in a release from the National Medical Audiovisual Center, Atlanta, Ga. The film is available free on a short-term loan basis from the Center's Annex, Chamblee, Georgia, 30005, or may be purchased from DuArt Film Laboratories, Inc., 245 West 55th St., N.Y., 10019.

NEWS ITEMS

Robert C. Kratz, M.D., a Newport otolaryngologist, recently won the Third Annual Professor Doctor Ignacio Barraquer Memorial Award sponsored by Smith, Miller and Patch, Inc., a New York drug firm. The award was presented to Doctor Kratz for his production of a medical teaching film demonstrating a technique of cleft lip surgery.

Michael L. Furcolow, M.D., professor of community medicine and pediatrics at the University of Kentucky College of Medicine, has been appointed governor for the Kentucky Chapter of the American College of Chest Physicians, according to a recent press report.

Richard F. Keeler, M.D., Whitesburg, was recently named Outstanding Young Man of the Year by the Whitesburg Junior Chamber of Commerce. Doctor Keeler, a Letcher County health officer, was also named health officer for Harlan County recently, according to an announcement by Walter H. Stepchuck, M.D., chairman of the Harlan County Board of Health.

Andrew M. Moore, M.D., Lexington, has been appointed to the council of the Southern Medical Association for a five-year term of office, according to a recent press report. Doctor Moore is a member of the KMA Board of Trustees.

Marshall Mahan, M.D. and John Hollinsworth, M.D., Louisville, residents in obstetrics and gynecology at Louisville General Hospital, recently won first place in the annual Ephraim McDowell contest with a paper entitled "Amniotic Fluid Embolism." The paper was presented at the annual District Five meeting of the American College of Obstetricians and Gynecologists held in Indianapolis. **Arthur Donovan, M.D.,** and **Thomas Ciaccio, M.D.,** Louisville, tied for the second place award.

William S. Jordan, Jr., M.D., dean of the University of Kentucky College of Medicine, and **William Keller, M.D.,** chairman of the department of psychiatry of the University of Louisville, School of Medicine, recently accepted membership on the newly established regional Health Advisory Committee to advise the U.S. Public Health Service.

Cleto Elequin, Jr., M.D., a Lexington psychiatrist, has been appointed acting deputy commissioner for clinical services of the Department of Mental Health, according to a recent announcement by Dale Farabee, M.D., Commissioner of Mental Health. Doctor Elequin has been clinical director of the admissions and intensive treatment service at Eastern State Hospital.

John M. Allen, M.D., Lexington, was recently appointed by President Johnson as medical advisor to Colonel Taylor L. Davidson, Kentucky State Director of Selective Service.

J. B. Tolliver, M.D., Whitesburg, team physician for the Whitesburg Yellowjackets, was recently honored at a Whitesburg High School ceremony during which he was presented with a football autographed by all of the team members.

William C. Greer, M.D., a psychiatrist, recently became executive director of the Pennyroyal Regional Mental Health Center in Hopkinsville. Doctor Greer graduated from the University of Tennessee Medical School in 1961 and completed his internship at Baptist Memorial Hospital in Memphis, Tenn. He took his residency training at the Topeka, Kansas, Veterans Administration Hospital and at the Menninger School of Psychiatry where he had a fellowship. He served with the Army Medical Corps as chief of the Mental Hygiene Consultant Service at Noble Army Hospital, Ft. McClellan, Ala.

Louis M. Muldrow Jr., M.D., is now practicing in association with L. Chase Allen, M.D., at the Lexington Medical Plaza, limiting his practice to plastic and reconstructive surgery. Doctor Muldrow graduated from Vanderbilt University Medical School in 1960 and interned at the University Medical Center, Jackson, Miss. He took his residency training in general surgery at Orange Memorial Hospital, Orlando, Fla., and University of Louisville Hospitals. He completed his residency training in plastic surgery at the University of South Texas Medical School, San Antonio, and in Chicago Hospitals.

Before prescribing, see complete prescribing information in SK&F literature or *PDR*. A brief precautionary statement follows.
Contraindications: Glaucoma, prostatic hypertrophy, stenosing peptic ulcer, pyloroduodenal obstruction, or bladder neck obstruction.
Precautions: Use cautiously in the presence of hypertension, hyperthyroidism, coronary artery disease; warn vehicle or machine operators of possible drowsiness.
Usage in Pregnancy: Use cautiously, especially in the first trimester. *Note:* The iodine in isopropamide iodide may alter PBI test results and will suppress I^{131} uptake; discontinue 'Ornade' one week before these tests.
Adverse Reactions: Drowsiness; excessive dryness of nose, throat or mouth; nervousness; insomnia. Other known possible side effects of the individual ingredients: nausea, vomiting, diarrhea, rash, dizziness, fatigue, tightness of chest, abdominal pain, irritability, tachycardia, headache, difficulty in urination. Thrombocytopenia, leukopenia and convulsions have been reported but no causal relationship has been established.

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Each capsule contains 8 mg. of Teldrin® (brand of chlorpheniramine maleate), 50 mg. of phenylpropanolamine hydrochloride, and 2.5 mg. of isopropamide, as the iodide.

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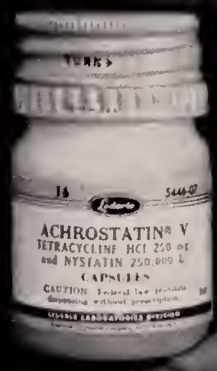
each one can give him all-day or all-night relief of nasal congestion

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Tetracycline HCl 250 mg /Nystatin 250,000 units



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Letter® provides all the advantages of the synthetically pure chemical sodium levothyroxine. Dosage is precise and potency is consistently uniform.

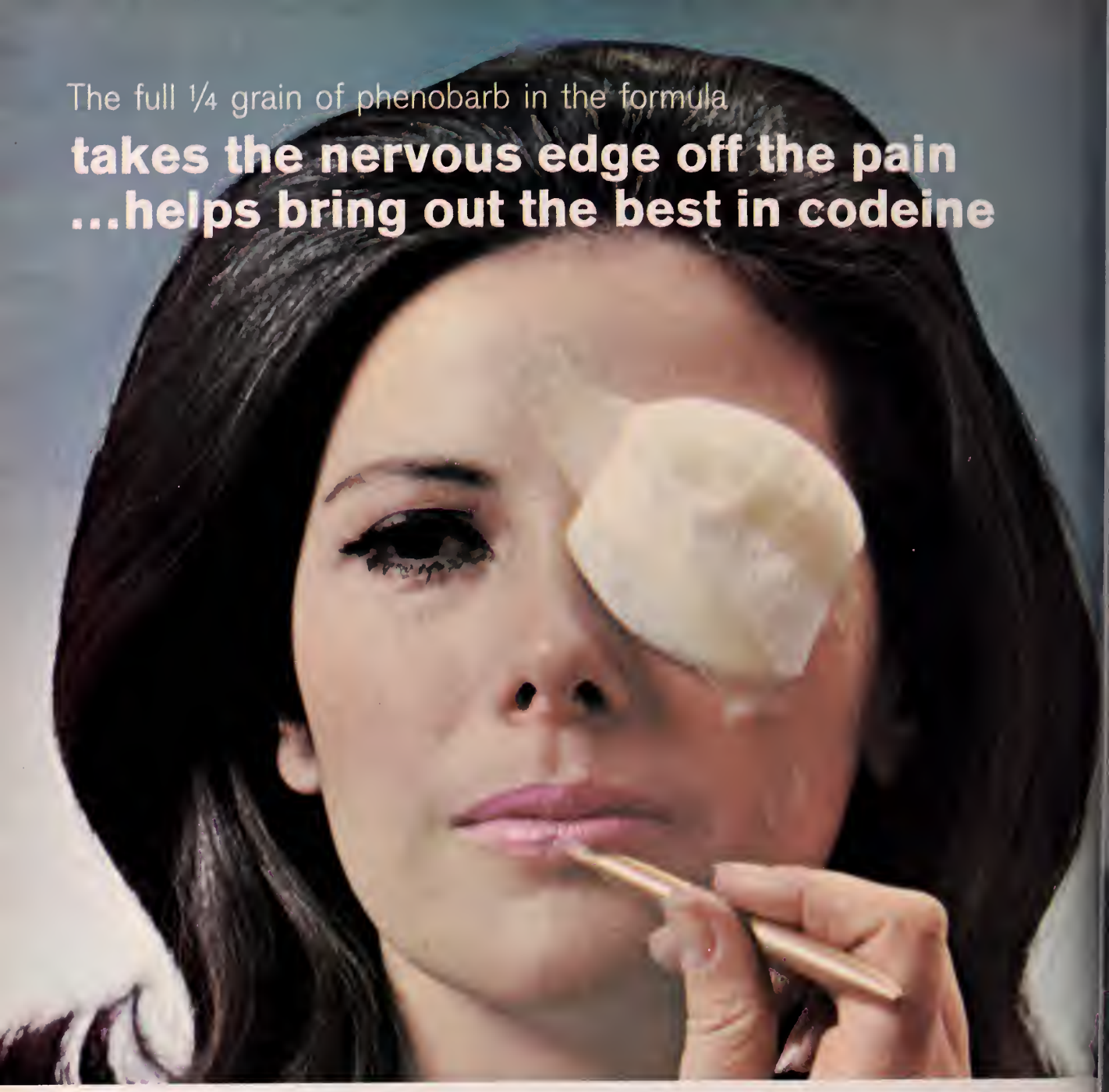
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Letter® is micronized to provide maximum opportunity for full absorption and clinical response.

In addition Letter® is distinctively color coded with an identifying number stamped on each tablet to provide accurate dosage control.

Indications: Hypothyroid conditions. **Contraindications:** Thyrotoxicosis, acute myocardial infarctions unless associated with hypothyroidism. In hypothyroidism with hypoadrenalism coadministration of corticoids with LETTER® is recommended. **Precautions and Side Effects:** Excessive dosage may result in diarrhea, cramps, palpitation, nervousness, rapid pulse, sweating. If symptoms appear, discontinue medication for several days, then reinstitute at a lower level. Since myxedema patients with heart disease may suffer seriously from abrupt increases in dosage, caution should be exercised in adjusting dosage. **Dosage:** Generally, the initial adult dosage is 0.1 mg. daily. This may be increased in small increments every one to three weeks until proper metabolic balance is achieved. **Available:** Bottles of 100 tablets, in six potencies: 0.025 mg. (violet), 0.05 mg. (peach), 0.1 mg. (pink), 0.2 mg. (green), 0.3 mg. (yellow), and 0.5 mg. (white).

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Side Effects: Side effects are uncommon—nausea, constipation, and drowsiness have been reported.

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The spray is best used twice, the second a few minutes after the first, repeated every three or four hours as needed. NTZ is for temporary relief of nasal symptoms, and overdosage should be avoided.

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References: 1. Hoon, J. R.: Arch. Surg. *93*:467 (Sept.) 1966.
2. Danhof, I. E., Personal communication.

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(when diuretics or sedatives are inadequate, for example)



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like an up-to-date, once-a-day dosage schedule
(a schedule not unlike timed-release medication, for example)

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...give them a little
(one tablet daily)

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chlorthalidone 50 mg., reserpine 0.25 mg.

Indications: Hypertension. **Contraindications:** History of mental depression, hypersensitivity, and most cases of severe renal or hepatic diseases. **Warning:** With the administration of enteric-coated potassium supplements, which should be used only when adequate dietary supplementation is not practical, the possibility of small-bowel lesions (obstruction, hemorrhage, and perforation) should be kept in mind. Surgery for these lesions has frequently been required and deaths have occurred. Discontinue coated potassium-containing formulations immediately if abdominal pain, distention, nausea, vomiting, or gastrointestinal bleeding occur. Discontinue one week before electroshock therapy, and if depression or peptic ulcer occurs. *Use in pregnancy:* Regroton should be used in pregnant patients or in women of childbearing potential only when, in the judgment of a physician, its use is deemed essential to the welfare of the patients; adverse reactions (thrombocytopenia, hyperbilirubinemia, altered carbohydrate metabolism, etc.) are potential problems in the newborn.
Precautions: Antihypertensive therapy with Regroton should always be initiated cautiously in postsympathectomy patients and in patients receiving ganglionic blocking agents, other potent antihypertensive drugs, or curare. Reduce dosage of concomitant antihypertensive agents by at least one-half. To avoid hypotension during surgery, discontinue Regroton therapy two weeks prior to elective surgical procedures. In emergency surgery, use, if needed, anticholinergic or adrenergic drugs or other supportive measures as indicated. Because of the possibility of progression of renal damage, periodic kidney function tests are indicated. Discontinue if the BUN rises or liver dysfunction is aggravated. Hepatic coma may be precipitated. Electrolyte imbalance, sodium and/or potassium depletion may occur. If potassium depletion should occur during therapy, Regroton should be discontinued and potassium supplements given, provided the patient does not have marked oliguria. Take particular care in cirrhosis or severe ischemic heart disease and in patients receiving corticosteroids, ACTH, or digitalis. Salt restriction is not recommended. Use cautiously in patients with ulcerative colitis or gallstones (biliary colic may be precipitated). Bronchial asthma may occur in susceptible patients. **Adverse Reactions:** The drug is generally well tolerated. The most frequent side effects are nausea, gastric irritation, vomiting, diarrhea, constipation, muscle cramps, headache, dizziness and acute gout. Other potential side effects include angina pectoris, anxiety, depression, bradycardia and ectopic cardiac rhythms (especially when used with digitalis), drowsiness, dull sensorium, hyperglycemia and glycosuria, hyperuricemia, lassitude, restlessness, transient myopia, impotence or dysuria, orthostatic hypotension which may be potentiated when chlorthalidone is combined with alcohol, barbiturates or narcotics, leukopenia, aplastic anemia, skin rashes, thrombocytopenia, agranulocytosis, nasal stuffiness, increased gastric secretions, nightmare, purpura, urticaria, ecchymosis, weakness, uveitis, optic atrophy and glaucoma, and pruritus. Eruptions and/or flushing of the skin, a reversible paralysis agitans-like syndrome, blurred vision, conjunctival injection, increased susceptibility to colds, dyspnea, weight gain, decreased libido, dryness of the mouth, deafness, anorexia, and pancreatitis when epigastric pain or unexplained G.I. symptoms develop after prolonged administration. Jaundice, xanthopsia, paresthesia, photosensitization and necrotizing angiitis are possible. **Average Dosage:** One tablet daily with breakfast. **Availability:** Pink, single-scored tablets in bottles of 100 and 1000. (B) 46-600-B
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FEBRUARY

13 Tenth KMA Trustee District Meeting, 5:30 p.m., Campbell House, Lexington

14 Seventh KMA Trustee District Meeting, 7:00 p.m., Science Hill Restaurant, Shelbyville

15 Obstetrics and Gynecology Grand Rounds, "Amniotic Fluid Biopsy As Diagnostic Tool," University of Kentucky Medical Center, Lexington

19 Fifth KMA Trustee District Meeting, 6:00 p.m. Executive Inn, Louisville (Rescheduled from January 15)

22 Obstetrics and Gynecology Grand Rounds, "Therapeutic Abortion — Management and Related Cytology," University of Kentucky Medical Center, Lexington

28 "Learning Disorders in Children" Symposium, Stouffer's Inn, Louisville

29 Obstetrics and Gynecology Grand Rounds, "Hormonal Producing Ovarian Tumors" and "Endometriosis", University of Kentucky Medical Center, Lexington

MARCH

7 Obstetrics and Gynecology Grand Rounds, "Complications of Birth Control Pills," University of Kentucky Medical Center, Lexington

14 Obstetrics and Gynecology Grand Rounds, "Malignant Disease Complicating Pregnancy," University of Kentucky Medical Center, Lexington

21 Obstetrics and Gynecology Grand Rounds, "Management of Third Trimester Bleeding," University of Kentucky Medical Center, Lexington

28 Thirteenth Annual Lexington Clinic Conference, Lexington Clinic, Lexington

APRIL

17-18 KMA Interim Meeting, Statler Hilton Motel (formerly The Lamplighter), Covington

24-25 Kentucky Chapter American Academy of Pediatrics joint meeting with Kentucky Chapter American Academy of Radiology, Park Mammoth Resort, Park City

25 Fourth Post Graduate Rheumatic Disease Symposium, Rankin Amphitheater, General Hospital, Louisville

IN SURROUNDING STATES

MARCH

12 Seventh Annual Alfred K. Nippert Memorial Lecture, "The Emerging Role of the Community Hospital," 8:15 p.m., The Christ Hospital, Cincinnati, Ohio

15-20 Second International Congress of Lymphology, Fontainebleau Hotel, Miami Beach, Fla.

18-20 American Academy of Pediatrics Annual Spring Session, Regency Hyatt House, Atlanta, Ga.

22-24 Central Surgical Association Meeting, Sheraton-Cleveland, Cleveland, Ohio

28-29 "Advances in Pediatrics" Postgraduate Course, Cleveland Clinic Educational Foundation, Cleveland, Ohio

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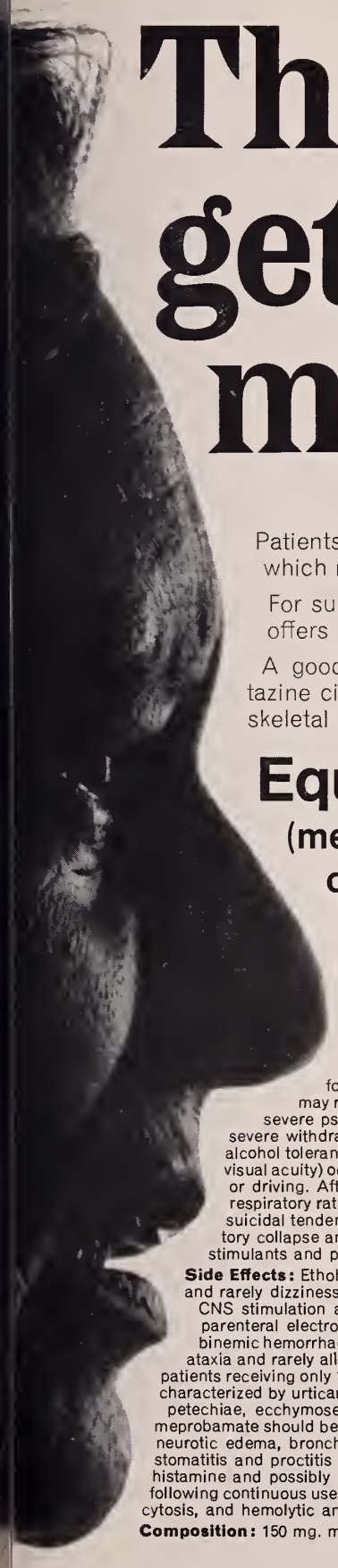
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Side Effects: Ethoheptazine and aspirin may occasionally cause nausea, vomiting, epigastric distress, and rarely dizziness. Overdosage may result in CNS depression (drowsiness and lightheadedness) or CNS stimulation and salicylate intoxication (requires induced vomiting or gastric lavage, specific parenteral electrolyte therapy for ketoacidosis and dehydration, and observation for hypoprothrombinemic hemorrhage [usually requires whole blood transfusions]). Meprobamate may cause drowsiness, ataxia and rarely allergic or idiosyncratic reactions. These reactions, sometimes severe, can develop in patients receiving only 1 to 4 doses who have had no previous contact with meprobamate. Mild reactions are characterized by urticarial or erythematous maculopapular rash. Acute nonthrombocytopenic purpura with petechiae, ecchymoses, peripheral edema and fever have been reported. If allergic reaction occurs, meprobamate should be stopped and not reinstituted. Severe reactions, observed very rarely, include angioneurotic edema, bronchial spasms, fever, fainting spells, hypotensive crises (1 fatal case), anaphylaxis, stomatitis and proctitis (1 case) and hyperthermia. Treat symptomatically such as with epinephrine, antihistamine and possibly hydrocortisone. A few cases of leucopenia, usually transient, have been reported following continuous use. Rarely, cases of aplastic anemia (1 fatal case), thrombocytopenic purpura, agranulocytosis, and hemolytic anemia have been reported; almost always, in the presence of known toxic agents.

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PLAN TO ATTEND

Fourteenth Annual Symposium on Cardiovascular Diseases

March 20 and 21, 1968

BROWN HOTEL — LOUISVILLE, KENTUCKY

Wednesday, March 20, 1968
9:00 a.m.

"Pulmonary Embolism"
JAMES K. ALEXANDER, M.D., Professor of Medicine and Director, Cardio-Pulmonary Laboratory, Baylor Medical School, Houston, Texas

"Surgical Management of Pulmonary Embolism"
FRANK C. SPENCER, M.D., Chairman, Department of Surgery, New York University Medical School, New York, New York

"Obesity and the Heart"
JAMES K. ALEXANDER, M.D.

"Anatomy of the Coronary Circulation and Conduction System"
THOMAS N. JAMES, M.D., Chairman, Cardiovascular Research Section, Henry Ford Hospital, Detroit, Michigan

"Surgical Approach to Coronary Heart Disease"
FRANK C. SPENCER, M.D.

"The Coronary Care Unit"
PHILIP SAMET, M.D., Chief, Section of Cardiology, Mt. Sinai Hospital and Associate Professor, University of Miami School of Medicine, Miami, Florida

PANEL DISCUSSION

Thursday, March 21, 1968
8:30 - 9:30 a.m.

"Grand Rounds"
Louisville General Hospital—Rankin Amphitheatre (Closed-circuit TV to Brown Hotel)
HENRY D. McINTOSH, M.D., Conducting

10:00 a.m.

"Management of Heart Block"
PHILIP SAMET, M.D.

The Bernard D. Rosenblum Memorial Lecture
"Hemodynamic Consequences of Cardiac Arrhythmias"
HENRY D. McINTOSH, M.D., Chairman, Department of Medicine and Director, Cardiovascular Division, Duke University Medical Center, Durham, North Carolina

"Mechanism of Action and Use of Antiarrhythmic Agents"
BORYS SURAWICZ, M.D., Professor of Medicine and Director, Cardiovascular Division, Department of Medicine, University of Kentucky Medical Center, Lexington, Kentucky

"Digitalis"
HENRY D. McINTOSH, M.D.

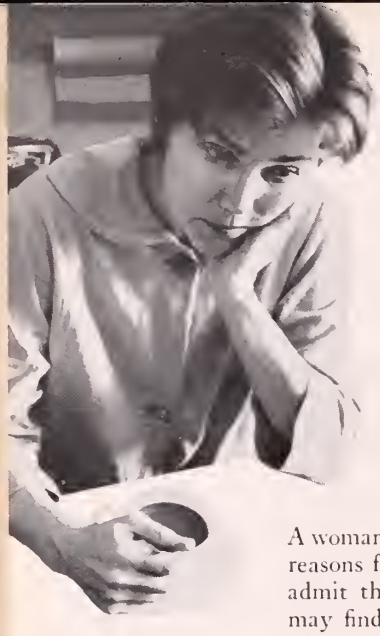
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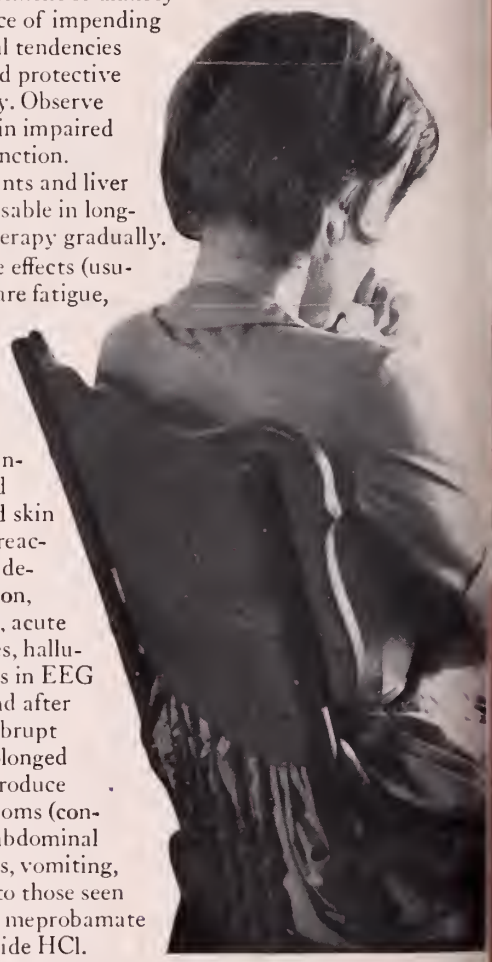


Before prescribing, please consult complete product information, a summary of which follows:

Contraindications: Infants, patients with history of convulsive disorders, glaucoma or known hypersensitivity to drug.

Warning: Not of value in the treatment of psychotic patients, and should not be employed in lieu of appropriate treatment.

Precautions: Limit dosage to smallest effective amount in elderly or debilitated patients (not more than 1 mg, one or two times daily initially) to preclude ataxia or oversedation, increasing gradually as needed or tolerated. As is true of all CNS-acting drugs, until correct maintenance dosage is established, advise patients against possibly hazardous procedures requiring complete mental alertness or physical coordination. Driving during therapy not recommended. In general, concurrent use with other psychotropic agents is not recommended. If such combination therapy is used, carefully consider individual pharmacologic effects–particularly with known compounds which may potentiate action of Valium (diazepam), such as phenothiazines, barbiturates, MAO inhibitors and other antidepressants. Advise patients against simultaneous ingestion of alcohol or other CNS depressants. Safe use in pregnancy not established. Employ usual precautions in treatment of anxiety states with evidence of impending depression; suicidal tendencies may be present and protective measures necessary. Observe usual precautions in impaired renal or hepatic function. Periodic blood counts and liver function tests advisable in long-term use. Cease therapy gradually.



Side Effects: Side effects (usually dose-related) are fatigue, drowsiness and ataxia. Also reported: mild nausea, dizziness, blurred vision, diplopia, headache, incontinence, slurred speech, tremor and skin rash; paradoxical reactions (excitement, depression, stimulation, sleep disturbances, acute hyperexcited states, hallucinations); changes in EEG patterns during and after drug treatment. Abrupt cessation after prolonged overdosage may produce withdrawal symptoms (convulsions, tremor, abdominal and muscle cramps, vomiting, sweating) similar to those seen with barbiturates, meprobamate and chlordiazepoxide HCl.

Dosage: *Adults:* Mild to moderate psychoneurotic reactions, 2 to 5 mg b.i.d. or t.i.d.; severe psychoneurotic reactions, 5 to 10 mg t.i.d. or q.i.d.; alcoholism, 10 mg t.i.d. or q.i.d. in first 24 hours, then 5 mg t.i.d. or q.i.d. as needed; muscle spasm with cerebral palsy or athetosis, 2 to 10 mg t.i.d. or q.i.d. *Geriatric patients:* 1 or 2 mg/day initially, increase gradually as needed and tolerated. (See Precautions.)

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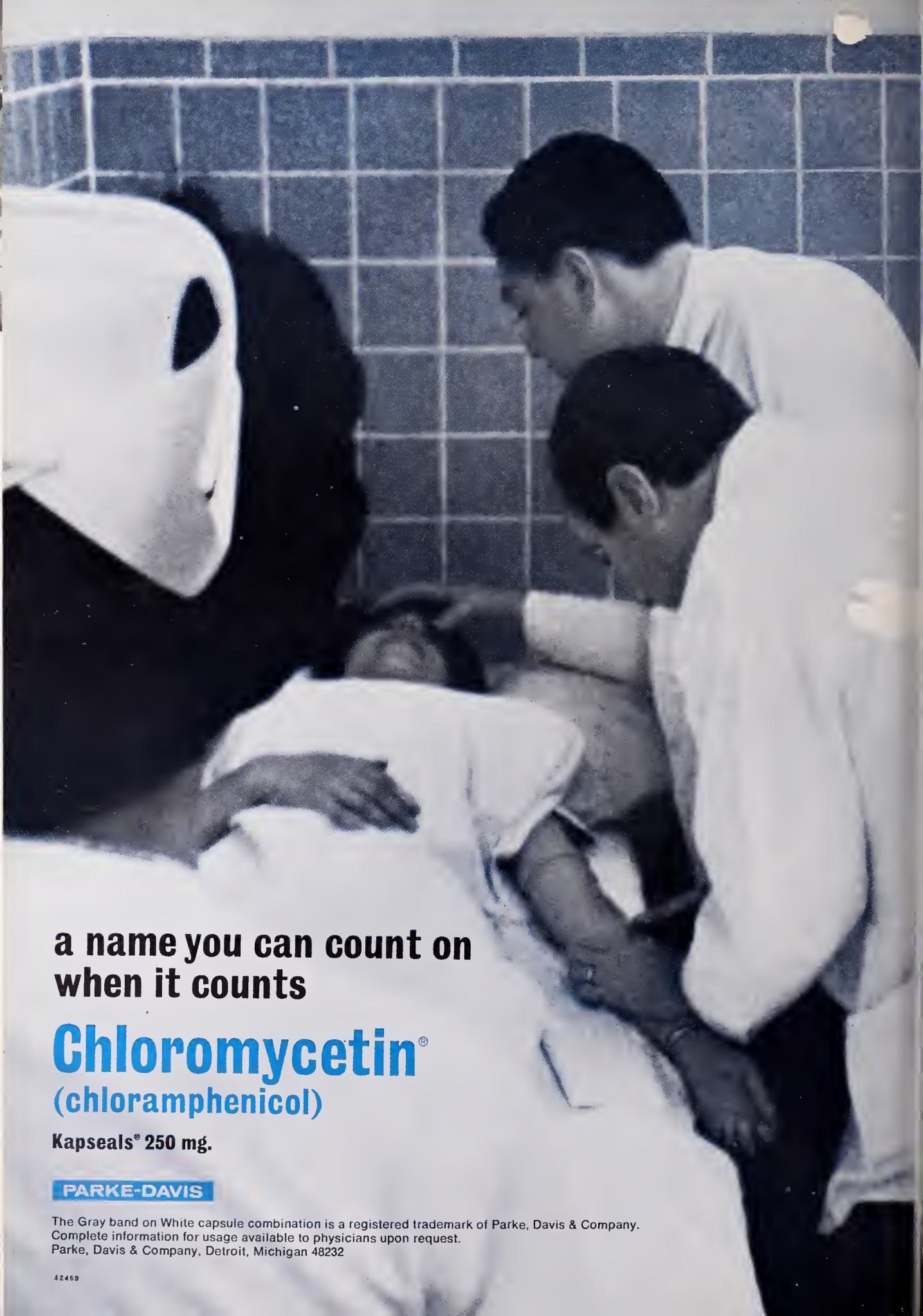
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KMA 1968 INTERIM MEETING

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Precautions—Overgrowth of nonsusceptible organisms may occure. Constant observation is essential. If new infections appear, appropriate measures should be taken. In infants, increased intracranial pressure with bulging fontanels has been observed. All signs and symptoms have disappeared rapidly upon cessation of treatment.

Side Effects—Gastrointestinal system—anorexia, nausea, vomiting, diarrhea, stomatitis, glossitis, enterocolitis, pruritus ani. Skin—maculopapular and erythematous rashes. A rare case of exfoliative dermatitis has been reported. Photosensitivity; onycholysis and discoloration of the nails (rare). Kidney—rise in BUN, apparently dose related. Transient increase in urinary output, sometimes accompanied by thirst (rare). Hypersensitivity reactions—urticaria, angioneurotic edema, anaphylaxis. Teeth— dental staining (yellow-brown) in children of mothers given this drug during the latter half of pregnancy, and in children given the drug during the neonatal period, infancy and early childhood. Enamel hypoplasia has been seen in a few children. If adverse reaction or idiosyncrasy occurs discontinue medication and institute appropriate therapy.

Average Adult Daily Dosage: 150 mg q.i.d. or 300 mg b.i.d. Should be given 1 hour before or 2 hours after meals, since absorption is impaired by the concomitant administration of high calcium content drugs, foods and some dairy products. Treatment of streptococcal infections should continue for 10 days, even though symptoms have subsided.

In the treatment of syphilis a dosage schedule of a total of 12 to 18 Gm. given in equally divided doses over a period of 10 to 15 days should be followed. Close follow-up observation of the patient is recommended, including appropriate laboratory tests, since demethylchlortetracycline has not had adequate evaluation in all stages of syphilis. Spinal fluid examination should be included as part of this follow-up.

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Please rush me full details on Mutual of Omaha's New Doctor's Income Plan available only to doctors under age 55.

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MESSAGE FROM THE PRESIDENT



A Call for Good Doctors*

WE, as doctors, feel that American medical care is the best in the world. Yet criticism is being leveled at us from many different sources.

A recent one was the report of the President's Advisory Commission on Health Manpower made public November 20, 1967. Many of the criticisms of this report concern parts of the health package on which doctors themselves have little influence. But other facets of this report are definitely on target and hit us "right between the eyes."

These we can and should do something to remedy. Two specific items were:

1. Long waits in the doctor's office and when finally seen, hurried impersonal attention received.
2. Difficulty in finding a doctor at night and on weekends, except in hospital emergency rooms where the care is frequently carried out by a foreign intern, resident or house physician.

Every doctor should review his office schedule and find out how long patients must wait to be seen. An appointment system will and can be made to work if you and your aides make the necessary effort. If we had to wait for any non-medical service as long as patients must wait in our offices, I am sure a better schedule would result. A personal interest in every patient should be a must.

In order to provide constant medical coverage, each community should set up an emergency call system. This would make it possible for a patient to find a doctor at any hour on holiday or weekend. At present we are losing the battle of hospital practice of medicine by default. We are constantly being told we should be more active in community affairs, politics, education, etc. This is important, but we should remember our first duty—"be a good doctor for your community".

GLENN W. BRYANT, M.D.
KMA VICE-PRESIDENT, CENTRAL DISTRICT

This is the second of a series of articles written at the request of KMA President George F. Brockman, M.D., by the three KMA vice-presidents and the president of the Woman's Auxiliary to KMA. The first article appeared in the January issue of The Journal.

The muscle relaxant that works before you write a prescription

Relieve painful skeletal muscle spasm in your office in minutes with a single 2 cc. injection of NORFLEX. Then, for sustained relief, write a prescription for NORFLEX tablets, 1 tablet b.i.d.

CONTRAINDICATIONS: Due to its anticholinergic action, NORFLEX should not be used in patients with glaucoma, pyloric or duodenal obstruction, stenosing peptic ulcer, prostatic hypertrophy or obstruction at the bladder neck, cardiospasm (megaesophagus) and myasthenia gravis. Use with caution in patients with tachycardia. Do not use propoxyphene (Darvon®) concurrently.

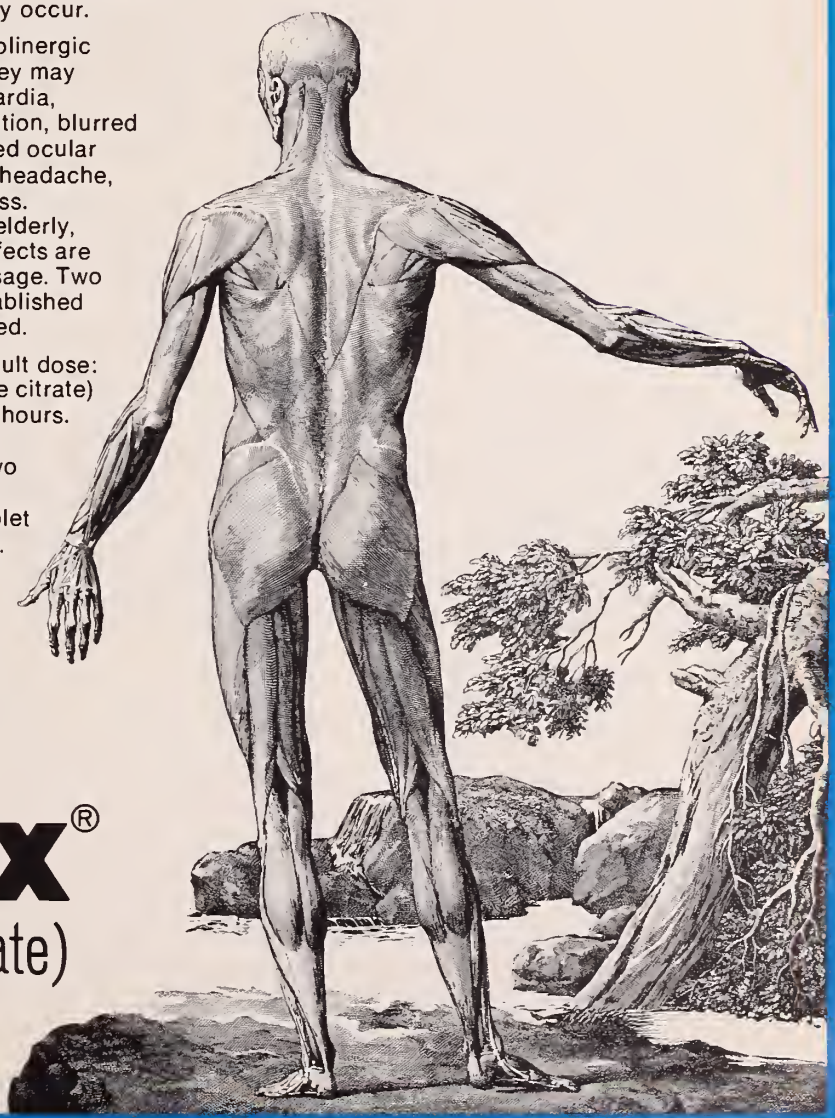
WARNING: Transient lightheadedness or dizziness following NORFLEX-INJECTABLE may occur.

SIDE EFFECTS: Due mainly to anticholinergic action and usually at high dosage. They may include dryness of the mouth, tachycardia, palpitation, urinary hesitancy or retention, blurred vision, dilatation of the pupil, increased ocular tension, weakness, nausea, vomiting, headache, dizziness, constipation, and drowsiness. Infrequently, mental confusion in the elderly, urticaria or other dermatoses. Side effects are usually eliminated by reduction in dosage. Two cases of aplastic anemia, with no established causal relationship, have been reported.

DOSAGE: **INJECTABLE** — Average adult dose: one ampul, 2 cc. (60 mg. orphenadrine citrate) I.M. or I.V. May be repeated every 12 hours. Relief may be maintained with one NORFLEX tablet b.i.d. **TABLETS** — Two tablets per day for adults, one in the morning, one in the evening. Each tablet contains 100 mg. orphenadrine citrate.

For full information, see Package Insert or P.D.R.

Riker Laboratories
Northridge, California 91324



Norflex®
(orphenadrine citrate)

PUBLIC HEALTH PAGE

Live Mumps Virus Vaccine†

RUSSELL E. TEAGUE, M.D., M.P.H.
Commissioner of Health
Commonwealth of Kentucky

ALTHOUGH mumps is not usually a severe disease, it remains as one of the most common infections of childhood and results in considerable morbidity and loss of school time. Manifestations of mumps may include aseptic meningitis, pancreatitis and, in post-pubertal males, a very painful orchitis.

An inactivated mumps vaccine has been available for a number of years, but, because of the short duration of immunity, it has not been very useful.

A live attenuated mumps virus vaccine has recently been licensed. This product, known as Jeryl-Lynn strain (B level) live attenuated mumps-virus vaccine, is being marketed as LYOVAC MUMPS-VAX®. It has been field tested in over 16,500 persons, including over 6,000 initially seronegative children. It produced no clinical side effects. The protective efficacy against natural mumps challenge was over 95 percent, equivalent to the efficacy of live attenuated measles vaccine. This protection has been shown to last at least 20 months. The neutralizing antibody induced by this vaccine has persisted for at least two years without substantial decline. The antibody titer induced by the vaccine, however, is only 15 to 25 percent of the titer induced by natural mumps infection.[1]

Because of the relatively low antibody titer and the short duration of field experience, the duration of immunity remains to be established. There is basis to expect life-long immunity after a single dose, but, "continued surveillance will be required to demonstrate this point."[2]

At present it is not known whether or not the vaccine could be used as an epidemic control measure. A field trial is currently under way in Fleming County in an attempt to answer this question. This study is a joint venture of the Fleming County Health Department and the Kentucky State Department of Health. The program has been fully approved and endorsed by the Fleming County Medical Society. The vaccine was obtained free of charge for field trial use through the National Communicable Disease Center.

Until more information is available with respect to duration of immunity and efficacy in protecting mumps contacts, the following recommendations have been established by the Public Health Service Advisory Committee on Immunization Practices[3] and the Committee on Control of Infectious Diseases of the American Academy of Pediatrics[4]:

(1) "Live mumps vaccine should not be administered to children less than 12 months of age because of the possible persistence of interfering maternal antibody"[3]

(2) "The vaccine should be specially considered in the following groups, if they have not had clinical mumps:
   (a) Boys who are approaching puberty
   (b) Adolescent and adult males
   (c) Children living in closed institutions, perhaps in summer camps, or under similar epidemiological circumstances."[4] Neither committee statement specified whether children attending school represent "similar epidemiologic circumstances."

(3) "The vaccine is not specifically contraindicated for younger children, but until more information on duration of immunity is available, the vaccine is not recommended for routine use."[3]

(4) "It is not known if live mumps vaccine will provide protection when administered after exposure. There is, however, no contraindication for its use at that time."[3]

(5) "Inactivated mumps vaccine or mumps immune globulin are no longer recommended for susceptible adult males who have been exposed to a person with mumps. There is insufficient data as yet on which to judge the possible value of live attenuated mumps vaccine in preventing disease following exposure."[4]

(6) The vaccine is contraindicated in pregnant women; persons hypersensative to neomycin or egg protein; persons with leukemia, lym-

(Continued on page 306)

†*This article was prepared by The Office of Communicable Disease, Division of Epidemiology, Kentucky State Health Department, 275 East Main Street, Frankfort.*



"Yes, Doctor, the pain is gone."

EMPIRIN'® COMPOUND with CODEINE PHOSPHATE gr. 1/2 No. 3

Each tablet contains: Codeine Phosphate gr. ½ (Warning—May be habit forming), Phenacetin gr. 2½, Aspirin gr. 3½, Caffeine gr. ½.

■ Despite introduction of synthetic substitutes, efficacy of 'Empirin' Compound with Codeine remains unchallenged.

BURROUGHS WELLCOME & CO. (U.S.A.) INC., Tuckahoe, N.Y.

An uncommon steroid for common inflammatory dermatoses

In everyday topical steroid therapy, Synalar produces rapid resolution of inflammation and itching in steroid-responsive dermatoses—and at relatively low cost to the patient.

Advanced molecular design enhances potency

Synalar combines the advantage of earlier corticosteroid compounds with unique structural innovations. As a result, preparations of Synalar 0.01% and Synalar 0.025% have been reported to be more potent topically and significantly more effective than hydrocortisone 1.0%. The unique fluocinolone acetonide molecule provides one of the most useful topical corticosteroids for everyday practice.

Impressive clinical results in a wide range of dermatologic problems

The clinical efficacy of Synalar has been extensively documented in the world literature. Commonly encountered diseases such as allergic and contact dermatitis, eczematous and seborrheic dermatitis, and neurodermatitis respond rapidly to Synalar, often where previous therapy with other topical corticosteroids has failed.

Low patient cost for wider usefulness

With Synalar, a high degree of efficacy does not mean high price. And—a small quantity goes a long way. Thus, your patients can often obtain the "economy" of a hydrocortisone preparation with the proved efficacy of a potent, truly advanced steroid.

Synalar®
fluocinolone acetonide





Turn page for contraindications, precautions and side effects.

For everyday topical steroid therapy

Synalar® 0.01%

fluocinolone acetonide provides economy in two practical dosage forms

For general use, the most economical and widely applicable concentration of Synalar is 0.01% Cream in a water-washable, vanishing cream base. Synalar Solution 0.01% is especially valuable in dermatoses involving moist, intertriginous areas or hairy sites where creams and ointments do not spread or penetrate readily. Synalar Solution is a unique dosage form—clear, nongreasy, cosmetically elegant.

Product Information

Contraindications: Tuberculous, fungal, and most viral lesions of the skin (including herpes simplex, vaccinia, and varicella). Not for ophthalmic use. Contraindicated in individuals with a history of hypersensitivity to any of the components. *Precautions:* Synalar preparations are virtually nonsensitizing and nonirritating. However, the solution may produce burning or stinging when applied to denuded or fissured areas. In some patients with dry lesions, the solution may increase dryness, scaling or itching. Where severe local infection or systemic infection exists, the use of systemic antibiotics should be considered, based on susceptibility testing. While topical steroids have not been reported to have an adverse effect on pregnancy, the safety of their use on pregnant females has not absolutely been established. Therefore, they should not be used extensively on pregnant patients, in large amounts, or for prolonged periods of time. *Side Effects:* Side effects are uncommon with topical corticosteroids. As with all drugs, however, a few patients may react unfavorably to Synalar under certain conditions. In such cases the agent should be discontinued and appropriate measures taken. *Availability:* Synalar (fluocinolone acetonide) Cream 0.025%—5, 15 and 60 Gm. tubes and 425 Gm. jars. Cream 0.01%—15, 45 and 60 Gm. tubes and 120 Gm. jars. Solution 0.01%—20 and 60 cc. plastic squeeze bottles. Ointment 0.025%—15 and 60 Gm. tubes. Neo-Synalar® (neomycin sulfate 0.5% [0.35% neomycin base], fluocinolone acetonide 0.025%) Cream—5, 15 and 60 Gm. tubes.

fluocinolone acetonide — an original steroid from

SYNTEX

LABORATORIES INC., PALO ALTO, CALIF.





Dietary Violations are Diminished Profoundly with...

†STEDYTABS Delfeta-sed ®

•**SEDAFAX** (brand of special micronized grade of AMOBARBITAL - Warning: may be habit forming).....**120 mg.**

•**DELFETAMINE** (brand of dl-N-METHYL-AMPHETAMINE HCl).....**30 mg.**

Usual Adult Dosage: **One tablet daily. To be taken in the morning.**

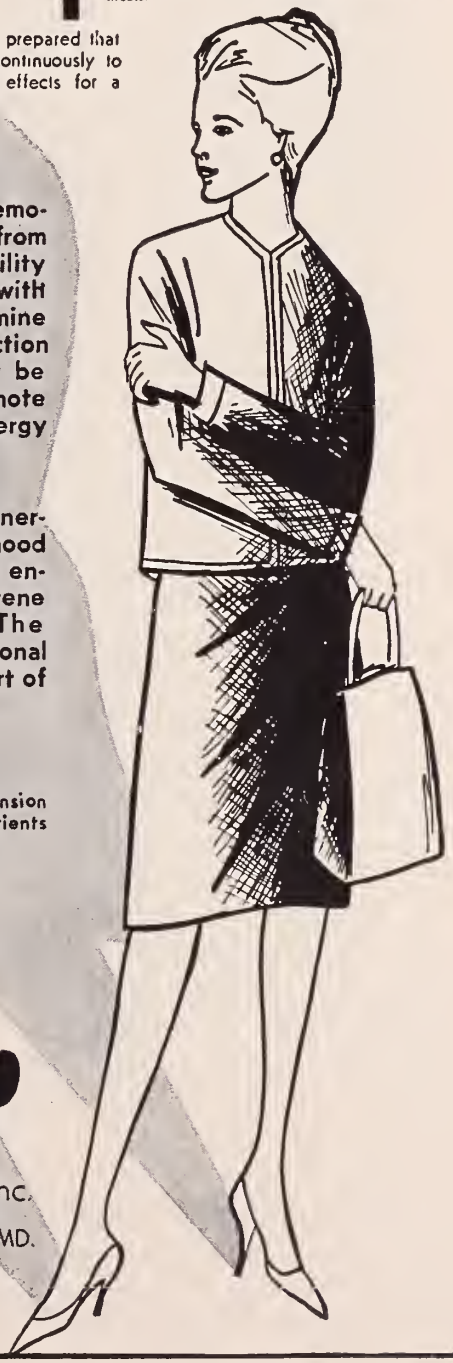
Tablets Delfeta-sed* ®

•**SEDAFAX** (brand of special micronized grade of AMOBARBITAL - Warning: may be habit forming.).....**40 mg.**

•**DELFETAMINE** (brand of dl-N-METHYL-AMPHETAMINE HCl.).....**10 mg.**

Usual Adult Dosage: In obesity, 1 tablet t. i. d. 30-60 minutes before meals. In all other conditions, take 1 tablet t. i. d. immediately after meals.

†**STEDYTABS DELFETA-SED** are so prepared that the active ingredients are released continuously to provide for prolonged therapeutic effects for a period of up to 8 to 10 hours.



The dieting obese sometime experience emotional problems as secondary symptoms resulting from restricted food intake: anxiety, depression, irritability and tension. Subjective relief is accomplished with Delfeta-sed (Delfetamine, dl-N-Methylamphetamine HCl) balanced with the mild euphoric sedative action of Sedafax, brand of Amobarbital-Warning: may be habit forming). The mood is altered to promote optimism and impart a cheerful sense of energy and well-being.

IN DEPRESSION: **A completely logical synergistic combination of wide application as a mood normalizer for the common depressed states encountered in everyday practice. Induces a serene outlook without excessive tranquillity. The patient is alert but composed, free from emotional peaks and troughs. Relieves anxiety which is a part of every illness.**

CAUTION:

Contraindicated in the presence of marked hypertension and in cases of coronary or cardiovascular disease; also, in patients hypersensitive to Barbiturates or ephedrine-like drugs.

TOMORROW'S THERAPY TODAY
ERL
ESTABLISHED 1929

PIONEERS IN obesity

EASTERN RESEARCH LABORATORIES, Inc.
302 S. CENTRAL AVENUE BALTIMORE 2, MD.

*T. M. 4-65



"Upper respiratory infection! I thought everything was a 'virus' these days?"

Some U.R.I. patients are more miserable than others.

That's why we make Novahistine® in two different tablet formulations.

And let you control the dosage.

With Novahistine LP tablets and Novahistine Singlet™ tablets you have the range and flexibility of decongestant dosage that lets you prescribe for the needs of the individual patient.

Novahistine LP tablets are most useful for relief of nasal congestion in patients without pain or fever.

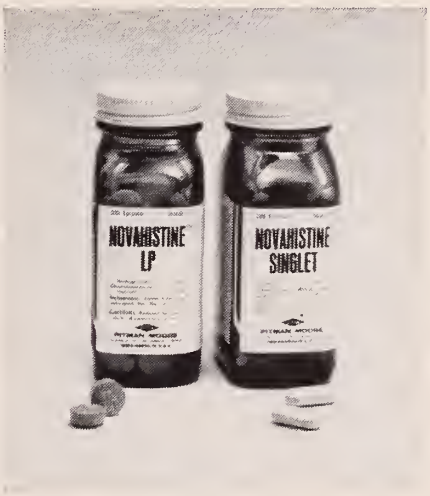
Novahistine Singlet tablets, which provide analgesic-antipyretic effect, as well as decongestant action, are indicated for upper respiratory infections accompanied by pain, aches and fever.

Whether you prescribe Novahistine LP or Novahistine Singlet, a total daily dose of 3 or 4 tablets will usually provide effective, continuous relief.

Use cautiously in patients with severe hypertension, diabetes mellitus, hyperthyroidism or urinary retention. Caution ambulatory patients that drowsiness may result.

Each Novahistine LP tablet contains phenylephrine hydrochloride, 25 mg., and chlorpheniramine maleate, 4 mg.

Each Novahistine Singlet tablet contains phenylephrine hydrochloride, 40 mg.; chlorpheniramine maleate, 8 mg.; and acetaminophen, 500 mg.



DOW PITMAN-MOORE DIVISION OF THE DOW CHEMICAL COMPANY, INDIANAPOLIS

Continuing Educational Opportunities

From The

KMA Postgraduate Medical Education Office

IN KENTUCKY

MARCH

14 Obstetrics and Gynecology Grand Rounds, "Malignant Disease Complicating Pregnancy," University of Kentucky Medical Center, Lexington

18 KMA Senior Day, University of Louisville Medical Students, Executive Inn, Louisville

20-21 Fourteenth Annual Symposium on Cardiovascular Diseases, Brown Hotel, Louisville (Acceptable for 11 credit hours by the American Academy of General Practice)

21 Obstetrics and Gynecology Grand Rounds, "Management of Third Trimester Bleeding," University of Kentucky Medical Center, Lexington

28 Thirteenth Annual Lexington Clinic Conference, Lexington Clinic, Lexington

APRIL

4-6 Kentucky Chapter, American College of Surgeons Annual Spring Meeting, Imperial House, Lexington

9 KMA Senior Day, University of Kentucky Medical Students, Imperial House, Lexington

17-18 KMA Interim Meeting, White House Inn (formerly The Lamplighter), Covington

18-20 Symposium on Selected Topics in Neurology and Neurosurgery (advanced): University of Kentucky College of Medicine, Lexington

24-25 Kentucky Chapter, American Academy of Pediatrics, Annual Spring Meeting, Park Mammoth Resort, Park City

25 Fourth Post Graduate Rheumatic Disease Symposium, Rankin Amphitheater, General Hospital, Louisville

26 Kentucky chapter, American College of Radiology, Annual Spring Meeting, Imperial House, Lexington

26-27 Kentucky Ob-Gyn Society, Annual Spring Meeting, Stouffer's Inn, Louisville

IN SURROUNDING STATES

MARCH

12 Seventh Annual Alfred K. Nippert Memorial Lecture, "The Emerging Role of the Community Hospital," 8:15 p.m., The Christ Hospital, Cincinnati, Ohio

15-20 Second International Congress of Lymphology, Fontainebleau Hotel, Miami Beach, Fla.

18-20 American Academy of Pediatrics Annual Spring Session, Regency Hyatt House, Atlanta, Ga.

22-24 Central Surgical Association Meeting, Sheraton-Cleveland, Cleveland, Ohio

28-29 "Advances in Pediatrics" Postgraduate Course, Cleveland Clinic Educational Foundation, Cleveland, Ohio

APRIL

1-5 American College of Physicians, 49th Annual Session, Sheraton-Boston Hotel and War Memorial Auditorium, Boston, Mass.

17-18 "Psychiatry and General Medicine," Cleveland Clinic Educational Foundation Postgraduate Course, Cleveland, Ohio

24 "Laboratory Aspects of Hematology," Cleveland Clinic Educational Foundation Postgraduate Course, Cleveland, Ohio



Help clear up that miserable stuffed-up feeling with Dimetapp. Each hard-working Extentab brings welcome relief from the stuffiness, drip and congestion of upper respiratory conditions for up to 10-12 hours. Yet, patients seldom experience drowsiness or overstimulation. The key to success is the Dimetapp formula: Dimetane (brompheniramine maleate)—along with phenylephrine and phenylpropanolamine, two time-tested decongestants. They get the job done... in a hurry.

Indications: Dimetapp is indicated for symptomatic relief of the allergic manifestations of respiratory illnesses, such as the common cold and bronchial asthma, seasonal allergies, sinusitis, rhinitis, conjunctivitis, and otitis.
Contraindications: Hypersensitivity to antihistamines. Not recommended for use during pregnancy.
Precautions: Until patient's response has been determined, he should be cautioned against engaging in operations requiring alertness. Administer with care to patients with cardiac or peripheral vascular diseases or hypertension.
Side Effects: Hypersensitivity reactions including skin rashes, urticaria, hypotension and thrombocytopenia, have been reported on rare occasions. Drowsiness, lassitude, nausea, giddiness, dryness of the mouth, mydriasis, increased irritability or excitement may be encountered.
Dosage: 1 Extentab morning and evening.
Supplied: Bottles of 100 and 500.

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RICHMOND, VA. 23220
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in sinusitis, colds, U.R.I.
Dimetapp® Extentabs®
Dimetane® [brompheniramine maleate], 12 mg.; phenylephrine HCl, 15 mg.; phenylpropanolamine HCl, 15 mg.)
up to 10-12 hours clear breathing on one tablet



If hypothyroidism leaves your patient feeling like this...

consider

LETTER®

(SODIUM LEVOTHYROXINE, ARMOUR) TABLETS

Synthetic Thyroid Replacement Therapy



Letter® provides all the advantages of the synthetically pure chemical sodium levothyroxine. Dosage is precise and potency is consistently uniform.

and

Letter® is micronized to provide maximum opportunity for full absorption and clinical response.

In addition Letter® is distinctively color coded with an identifying number stamped on each tablet to provide accurate dosage control.

Indications: Hypothyroid conditions. **Contraindications:** Thyrotoxicosis, acute myocardial infarctions unless associated with hypothyroidism. In hypothyroidism with hypoadrenalism coadministration of corticoids with LETTER® is recommended. **Precautions and Side Effects:** Excessive dosage may result in diarrhea, cramps, palpitation, nervousness, rapid pulse, sweating. If symptoms appear, discontinue medication for several days, then reinstitute at a lower level. Since myxedema patients with heart disease may suffer seriously from abrupt increases in dosage, caution should be exercised in adjusting dosage. **Dosage:** Generally, the initial adult dosage is 0.1 mg. daily. This may be increased in small increments every one to three weeks until proper metabolic balance is achieved. **Available:** Bottles of 100 tablets, in six potencies: 0.025 mg. (violet), 0.05 mg. (peach), 0.1 mg. (pink), 0.2 mg. (green), 0.3 mg. (yellow), and 0.5 mg. (white).

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Application

FOR SPACE IN THE SCIENTIFIC EXHIBIT SECTION

1968 Annual Meeting — Kentucky Medical Association

Convention Center — **Louisville, Kentucky** — **September 24, 25, 26**

Fill Out and Mail to:

T. R. MARSHALL, M.D., Chairman

Committee on Scientific Exhibits

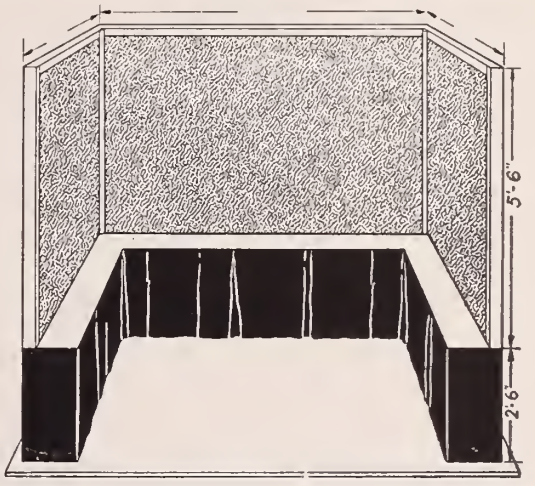
Kentucky Medical Association

3532 Janet Avenue

Louisville, Kentucky 40205

Applications for space should be received before July 1, 1968

Dimensions and structure of KMA Scientific booth are shown in accompanying illustration



1. Title of Exhibit: .....
2. Name (s) of Exhibitor (s): (AMA Member?) .....

   Institution (if desired): .....

   Mailing Address .....
3. Do you have a built-in exhibit? .....
4. Description of Exhibit: (Attach Brief Description Not To Exceed 50 Words to this blank)
5. Exhibit will consist of the following: (Check which)

   Charts and Posters.... Photographs.... Drawings.... X-rays....

   Specimens.... Moulages.... Other Material..... (Describe)
6. Booth Requirements:

   Amount of total wall space needed? .....

   Back wall ..... Side walls (All side walls are 4') .....

   Square feet needed? ..... Shelf desired? (yes or no) .....
7. Indicate sources of assistance provided in connection with the exhibit. .....
8. Has this exhibit been exhibited before? If so, when & where? .....

Date ....

Signature of Applicant

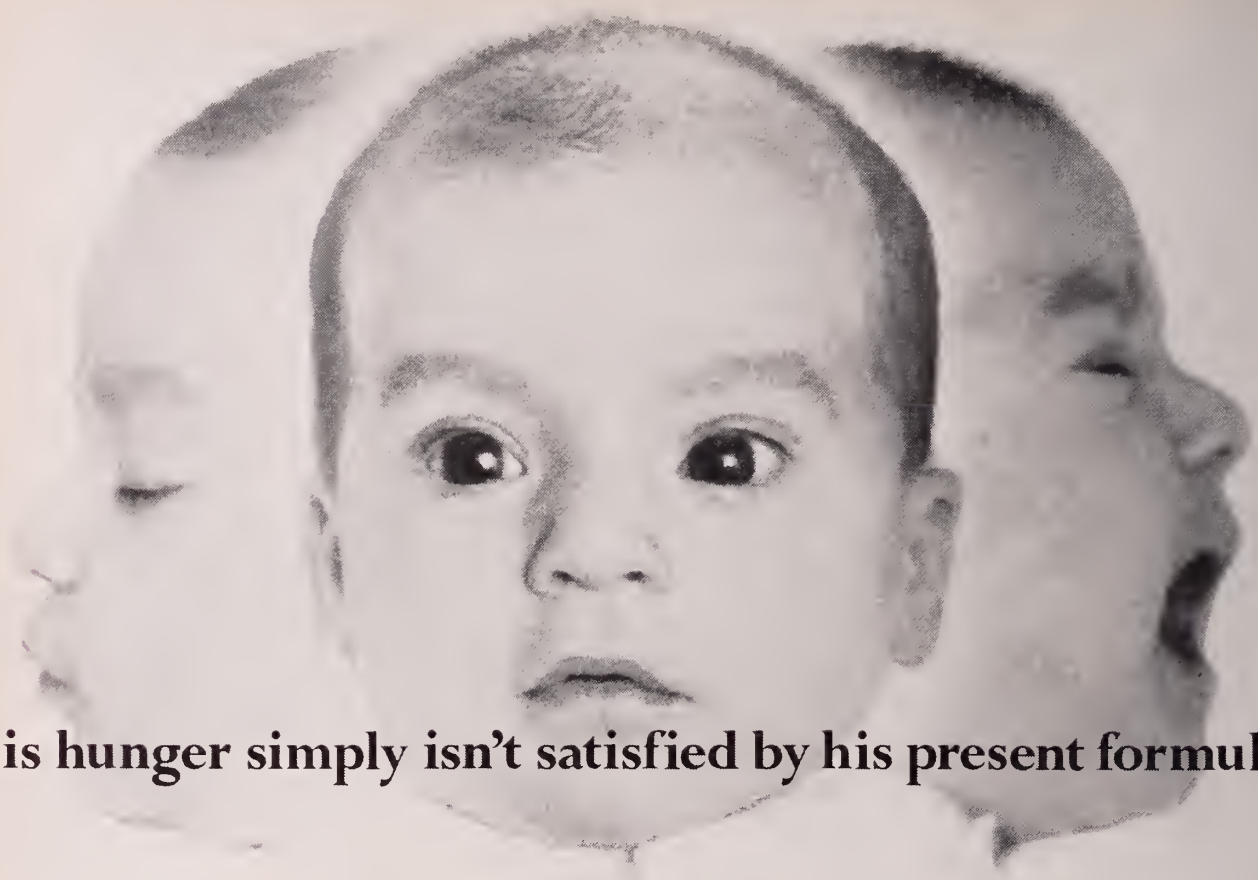
The Mead Johnson Aesculapius Award of $200.00 and identifying plaque will be presented by the KMA for the best exhibit in 1968.

The Kentucky Medical Association will provide without cost to the exhibitor the following: Exhibit space, shelves, sign for booth, current, bracket lights, provided all items are approved in advance by the committee.

Cost of transporting exhibits to the meeting must be borne by the individual exhibitor as well as costs of cards, signs, etc., which are a part of the exhibit.

View boxes, furniture, decorations, etc., may be rented, if desired, by applying directly to Jos. T. Griffin Company, 704 West Main Street, Louisville 2, who supply equipment for the annual KMA meeting.

Due to the shortage of space, please have your exhibit as compact as possible.



f his hunger simply isn't satisfied by his present formula...

he problem could be essential fatty acid imbalance

xcessive appetite, inordinate rying, poor weight gain and skin ashes can be caused by an infant ormula that does not have fatty cid balance.[1-5] Linoleic acid is a required nutrient which is converted, in part, to metabolically-active arachidonic acid. Preliminary studies have shown that linolenic acid, if present in sufficient quantity, can adversely affect this conversion. Optimil has only trace amounts of linolenic acid.

at analyses of Optimil and two leading modified-milk formulas*

Fatty acids	Optimil % of fat	Prod. #2 % of fat	Prod. #3 % of fat
Saturated	**40.4**	**44.2**	**39.0**
Caprylic	3.3	1.6	2.2
Capric	2.2	1.1	1.5
Lauric	16.0	10.1	11.7
Myristic	6.3	5.1	5.5
Palmitic	10.2	16.2	14.0
Stearic	2.3	9.0	4.5
Unsaturated	**59.6**	**55.8**	**61.0**
Oleic	40.7	33.0	24.7
Linoleic	18.9	19.5	34.6
Linolenic	trace	2.3	1.7

* Mean of three lots tested

Optimil, an optimum-nutrition infant formula, helps reduce problem

n feeding

New Optimil from Carnation contains more than enough linoleic cid and only a trace of linolenic. Thus Optimil-fed infants maintain dequate tissue levels of rachidonic acid. This is reflected y the high caloric efficiency f Optimil, and helps to satisfy unger and promote efficient veight gain and a clear complexion - makes an infant contented.[6-8]

Recommend Optimil

For optimum contentment, ptimum digestibility and optimum rowth, recommend Optimil, the ptimum-nutrition infant formula. omes in the new full 16-fluid unce can for maximum onvenience in formula preparation. vailable only at drug stores.

in digestibility

Of all the fatty acids commonly found in infant formulas, stearic acid is the least digestible.[9] Optimil contains a comparatively low level of stearic acid and a relatively high level of oleic acid, which has been shown to aid in the absorption of stearic acid. Optimil also has a high ratio of unsaturated fat to saturated fat which further enhances the formula's digestibility.

1. Hansen, A. E., et al: Pediatrics 31:171, 1963. 2. Holman, R. T.: Fed Proc. 23:1062, 1964. 3. Holman, R. T., et al.: Amer. J. Clin. Nutrition 14:70, 1964. 4. Hepner, R., et al.: Pediatrics 33:94, 1964. 5. Pikaar, N.A., and Fernandes, J.: Amer. J. Clin. Nutrition 19:194, 1966. 6. Hepner, R.: Current Therapeut. Research 9:140 (Suppl. 35) 1967. 7. Hart, L. M.: Ibid., p. 179. 8. Nichols, M. M.: Ibid., p. 184. 9. Young, R. J. and Garrett, R. L.: J. Nutrition 81:321, 1963.

in stooling

Stooling problems and perianal dermatitis are minimized by the presence of lactose. A low renal solute load assures ample expendable water reserves to meet stress situations. Adequate amount of all-known essential vitamins and 8 mg. of iron are included per diluted quart.





Optimil

From the files of the

COMMITTEE FOR THE

STUDY OF MATERNAL MORTALITY

CASE 8-65. This 36 year old married, white, gravida 10 para 9 who had been previously diagnosed as having Marfan's syndrome, was admitted to the hospital in early labor at 9:00 P.M. on May 20, 1965. Her expected date of delivery was calculated to be sometime in April, but the height of the fundus suggested a somewhat later expected date. Labor had begun spontaneously at 1:30 P.M. She was having hard contractions every two to three minutes, lasting for 50 seconds. The blood pressure was 180/100, temperature 100.4°, pulse 80 and respirations 20. The fetal heart beat was counted at 146. The cervix was dilated to 4 cm, and the fetus lay in breech presentation. Amniotic fluid was seen leaking from the cervix, the time at which the membranes had ruptured was not determined. Some dark blood was also noted in the vagina. She had had no prenatal care. A note on the labor record stated that the patient had congenital heart disease.

The patient received 50 mg of Demerol intramuscularly at 10:10 P.M. The blood pressure continued to be elevated to 176/110, and the fetal heart beat was counted at 140 in the right lower quadrant. At 10:35 P.M. she was examined by her physician after which she passed a large amount of bright red blood clot.

At 11:00 P.M., the blood pressure was 88/60 and it was observed that the uterine contractions had ceased. She received 1 cc of Aramine intramuscularly at 11:15 P.M., and at 11:30 P.M. the blood pressure was 112/80. Five hundred cc of whole blood was started at midnight when the blood pressure was 100/80. Her skin was cool to touch, she was perspiring, and her lower abdomen felt tight. She received 50 mg of Dramamine intramuscularly for nausea and another 500 cc of whole blood was started. She continued to have some vaginal bleeding and passed three large blood clots. The third pint of whole blood was started at 4:45 A.M. on May 21, 1965. By now the blood pressure had risen to 170/110.

The patient continued to have heavy, bright red vaginal bleeding. At 11:00 A.M. on May 21, the blood pressure was 180/100, temperature 100°, and pulse 120. She voided 400 cc of urine and vomited a small amount of greenish material. She was examined by her physician and the cervix was found to be dilated to 7 cm at 11:45 A.M. An x-ray of the abdomen showed an anencephalic term-sized infant presenting as a transverse lie. The fourth pint of blood was started at 12:50 P.M., and the pateint was not bleeding excessively at this time.

A surgical consultant described the abdomen as showing one plus tenderness throughout, but no significant rigidity. Because of her poor condition he suggested a medical consultation. A dry hacking cough noted on admission had become productive. The oral fluid intake to this point was 1050 cc and the measured output was 550 cc. The patient was restless and vomited a large amount of light green material. The blood pressure had stabilized at 174/100, the temperature was 101.6°, the pulse was 120 and the respirations were 36. Her speech became confused and she tried to get out of bed. A chest x-ray was taken at 5:35 P.M. and she received 2 cc Thiomerin and 0.6 mg Digitoxin intramuscularly.

On the morning of May 22, the patient's hemoglobin was 10 gm. Her heart rate remained rapid, approximately 140 per minute; the blood pressure was 160/100 and the respiratory rate was 45-50 per minute. A medical consultant saw the patient and described her as a thin, cachectic female with increased pigmentation of the skin and rather marked exophthalmos. Her lips and tongue were moderately cyanotic. The neck veins were slightly distended when the patient was supine. The chest was resonant to percussion, but the diaphragm was high and there was absence of breath sounds bilaterally in the lower thorax. Her heart rate was 140/minute, and was strong and bounding with no murmurs. The abdomen was soft, the uterus enlarged and the abdomen generally tender. Fetal parts were palpated in the upper portion of the abdomen. Rectal examination showed only slight cervical dilation despite the previously recorded 7 cm dilation the day before. No fetal parts presented.

The surgeon saw the patient again and thought she seemed to be losing ground; the abdominal tenderness had become more marked. She had no particular rigidity; however, it was felt she should be delivered by section even though she was described as a very poor risk. The preoperative diagnosis was abruptio placentae. She was given 100 mg Novocaine at L 2-3 interspace by the surgeon. The patient was moving and an accurate spinal was difficult. The spinal fluid returned clear. The patient had decreased sensation below the umbilicus.

The operation began at 7:15 P.M. The block required supplementation with cyclopropane because of the patient's restlessness. When the abdomen was opened, free dark blood was encountered and the fetus was found to be free in the abdominal cavity, as was most of the placenta, only one small area of which remained attached. The uterus had ruptured on the left side down to the cervix. The peritoneum was separated from the anterior surface of the uterus, as was the bladder. The left tube and ovary had

been separated from the uterus by the tear. A supracervical hysterectomy was performed. The round ligaments were not sutured into the angle because of the friable tissue. The excess old blood and clots were removed and the incision was closed. The patient received one pint of blood on the operating table and another was ready to be started. The operation was completed at 8:06 P.M. and she withstood the procedure fairly well. The infant was an anencephalic stillborn; it was not weighed.

At 10:45 P.M. the patient received 75 mg of Demerol for restlessness; she seemed confused and disoriented, picking imaginary objects from the air, and pantomining the act of smoking. On May 23, her respirations were more labored, and were counted at 44/minute. The temperature was 100, the blood pressure 160/100 and the pulse 134. She was given 0.2 mg of Digitoxin at 2:45 A.M. and 1000 cc of 5% dextrose in water were started intravenously at 6:00 A.M. At 7:30 A.M. her temperature was 103°, pulse 128 and respirations 40. Because she was cyanotic, she was placed in an oxygen tent. Her cyanosis improved, but she still failed to respond when she was spoken to. Her respirations were very shallow at 9:30 A.M., her blood pressure was 140/90 and her pulse was 148. She was pronounced dead at 11:45 A.M. on May 23.

The autopsy findings were as follows: (1) ruptured uterus (from the clinical history) due to pregnancy and previous cesarean sections; (2) Marfan's developmental syndrome; (3) bilateral hydrothorax (600 cc left, 50 cc right; (4) chronic passive congestion of the lungs, liver, kidney, spleen and adrenals; and (5) terminal bronchopneumonia.

Comments

This was classified as a direct obstetrical death with preventable factors on the part of both the patient and the physician. This patient should have had the benefit of family planning information long before she became a grand multipara. If she had had the information and had refused to use it, the responsibility would have been hers alone. This patient would have been considered a high risk because of her age and parity even without the added medical complications of the connective tissue defect associated with Marfan's syndrome. A 25 per cent incidence of rupture of the heart or aorta during labor has been reported in patients with the connective tissue defect. The Committee thought that valuable time had been lost after the shock became evident, so that the section was performed when the patient was no longer a reasonable surgical risk.



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*As shown by *in vitro* studies.
1. Crunden, A. B., Jr., and Davis, W. A.: Am. J. Obst. & Gynec. *65*:311 (Feb.) 1953.



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Emetrol®
phosphorated carbohydrate solution
emesis control



in moderate hypertension and
poorly controlled mild hypertension
(when diuretics or sedatives are inadequate, for example)

When your patients expect a lot...

like relief from hypertensive symptoms
(headache, fatigue, nervousness, palpitation or insomnia, for example)

like an up-to-date, once-a-day dosage schedule
(a schedule not unlike timed-release medication, for example)

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(one tablet daily)

Regroton®

chlorthalidone 50 mg., reserpine 0.25 mg.

Indications: Hypertension. **Contraindications:** History of mental depression, hypersensitivity, and most cases of severe renal or hepatic diseases. **Warning:** With the administration of enteric-coated potassium supplements, which should be used only when adequate dietary supplementation is not practical, the possibility of small-bowel lesions (obstruction, hemorrhage, and perforation) should be kept in mind. Surgery for these lesions has frequently been required and deaths have occurred. Discontinue coated potassium-containing formulations immediately if abdominal pain, distention, nausea, vomiting, or gastrointestinal bleeding occur. Discontinue one week before electroshock therapy, and if depression or peptic ulcer occurs. *Use in pregnancy:* Regroton should be used in pregnant patients or in women of childbearing potential only when, in the judgment of a physician, its use is deemed essential to the welfare of the patients; adverse reactions (thrombocytopenia, hyperbilirubinemia, altered carbohydrate metabolism, etc.) are potential problems in the newborn.
Precautions: Antihypertensive therapy with Regroton should always be initiated cautiously in postsympathectomy patients and in patients receiving ganglionic blocking agents, other potent antihypertensive drugs, or curare. Reduce dosage of concomitant antihypertensive agents by at least one-half. To avoid hypotension during surgery, discontinue Regroton therapy two weeks prior to elective surgical procedures. In emergency surgery, use, if needed, anticholinergic or adrenergic drugs or other supportive measures as indicated. Because of the possibility of progression of renal damage, periodic kidney function tests are indicated. Discontinue if the BUN rises or liver dysfunction is aggravated. Hepatic coma may be precipitated. Electrolyte imbalance, sodium and/or potassium depletion may occur. If potassium depletion should occur during therapy, Regroton should be discontinued and potassium supplements given, provided the patient does not have marked oliguria. Take particular care in cirrhosis or severe ischemic heart disease and in patients receiving corticosteroids, ACTH, or digitalis. Salt restriction is not recommended. Use cautiously in patients with ulcerative colitis or gallstones (biliary colic may be precipitated). Bronchial asthma may occur in susceptible patients. **Adverse Reactions:** The drug is generally well tolerated. The most frequent side effects are nausea, gastric irritation, vomiting, diarrhea, constipation, muscle cramps, headache, dizziness and acute gout. Other potential side effects include angina pectoris, anxiety, depression, bradycardia and ectopic cardiac rhythms (especially when used with digitalis), drowsiness, dull sensorium, hyperglycemia and glycosuria, hyperuricemia, lassitude, restlessness, transient myopia, impotence or dysuria, orthostatic hypotension which may be potentiated when chlorthalidone is combined with alcohol, barbiturates or narcotics, leukopenia, aplastic anemia, skin rashes, thrombocytopenia, agranulocytosis, nasal stuffiness, increased gastric secretions, nightmare, purpura, urticaria, ecchymosis, weakness, uveitis, optic atrophy and glaucoma, and pruritus. Eruptions and/or flushing of the skin, a reversible paralysis agitans-like syndrome, blurred vision, conjunctival injection, increased susceptibility to colds, dyspnea, weight gain, decreased libido, dryness of the mouth, deafness, anorexia, and pancreatitis when epigastric pain or unexplained G.I. symptoms develop after prolonged administration. Jaundice, xanthopsia, paresthesia, photosensitization and necrotizing angiitis are possible. **Average Dosage:** One tablet daily with breakfast. **Availability:** Pink, single-scored tablets in bottles of 100 and 1000. (B) 46-600-B
For details, see complete Prescribing Information.

Geigy Pharmaceuticals, Division of
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Geigy



THE INSURANCE PAGE



Doctors' Fees

ONE of the most difficult tasks facing the physician, particularly the new physician, is setting an equitable and satisfactory fee for his services. Traditionally setting his own fees has been the doctor's prerogative and privilege. This privilege though, has also always imposed an obligation to practice the utmost fairness in setting his fees—fairness to his patient and to himself.

Many factors are considered in arriving at a suitable value for a particular service: the time and difficulty involved in rendering the service; the amount of professional skill and knowledge required; the sum generally charged for the service by other physicians in the area; and, at times, the financial status of the patient. Most physicians feel the latter point is to be considered only in lowering fees to prevent financial hardship. Apparently much of the recently alleged "rise" in physicians' fees is due to the fact that on government paid cases, physicians no longer reduce their fees because of a patient's economic condition. The magnitude of this practice has come as a jolt to many federal planners.

The privilege of setting fees has been under attack by one of medicine's powerful antagonists, particularly labor leaders and government medical planners. They have continually preached that doctors are not capable of applying sufficient prudence and discretion to insure the public good. They repeatedly have cited cases of overcharging by that small minority of the profession who will profiteer on the public.

Those few doctors who have no scruples against overcharging are also proving a serious threat to the many medical insurance and prepayment plans which have so far been our chief bulwark against federal encroachment on medical practice.

A particularly damaging practice to prepayment plans is the basing of fees on the amount of insurance coverage. This, in effect, cancels out the value of more comprehensive protection for the patient since the greater his coverage, the more he has to pay to make up the difference. In addition, overcharging could literally destroy plans based on full payment of professional fees (prevailing fees, usual and customary, etc.)

If we are to continue, as in the past, to set values on our own services, we must be increasingly aware of the public trust and the great ethical obligation it places upon us. We would be a foolish group indeed, if we fritter away this privilege by not practicing the utmost fairness and prudence in this vital area.

WILLIAM W. HALL, M.D.

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A simplified approach to the practical management of hypertension



Enduron: (methyclothiazide) A basic building block for mild hypertensives



Excellent day-long Na^+ output, yet easy on the K^+

Enduron provides an excellent starting therapy. Your patient's sodium excretion is greatly enhanced. Yet potassium loss is low.

The therapeutic action is smooth, and persits for a full 24 hours. With Enduron you can prescribe convenient once-a-day dosage without skimping your patients on day-long thiazide effectiveness.

Of course, as with all thiazides, supplemental dietary potassium should also be considered.

Use Enduron as a basic therapy in patients with mild to moderate hypertension. A single 5-mg. tablet each day is ample in most cases.

Once a day, every day

ENDURON

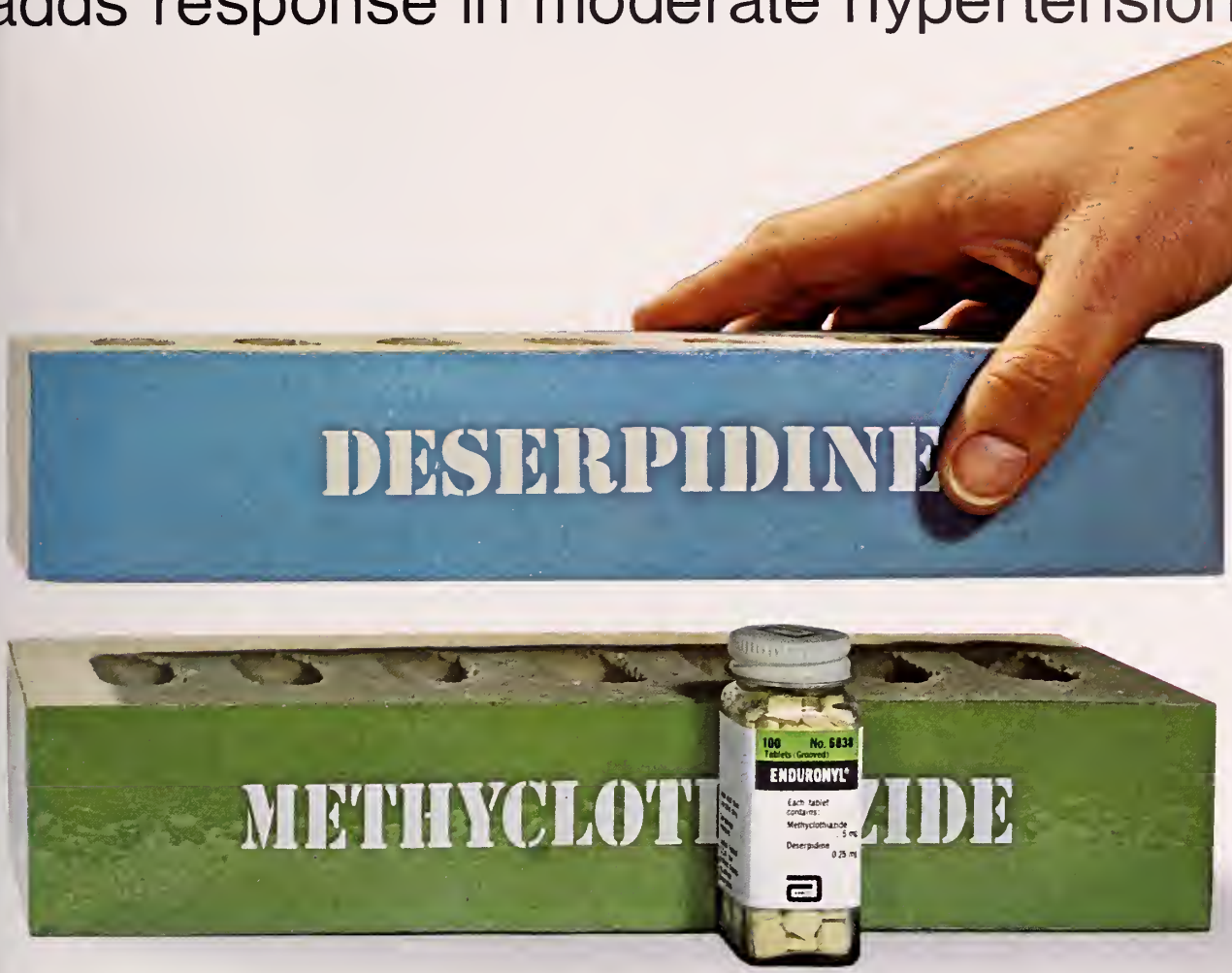
METHYCLOTHIAZIDE

MILD TO MODERATE TO SEVERE



See Brief Summary on final page of advertisement

Enduronyl: Its deserpidine component adds response in moderate hypertension



Less frequent rauwolfia side effects than with reserpine

When you wish to build further response, consider shifting to Enduronyl.

Enduronyl adds a building block of *deserpidine*. This is a purified rauwolfia alkaloid available only from Abbott. It adds good antihypertensive and tranquilizing activity. Yet its incidence of untoward effects, particularly lethargy and depression, is lower than with reserpine.

Enduronyl is available plain or Forte. The latter provides its variation where most helpful, by doubling the deserpidine.

Use Enduronyl for patients throughout the broad range of mild to moderately severe hypertension.

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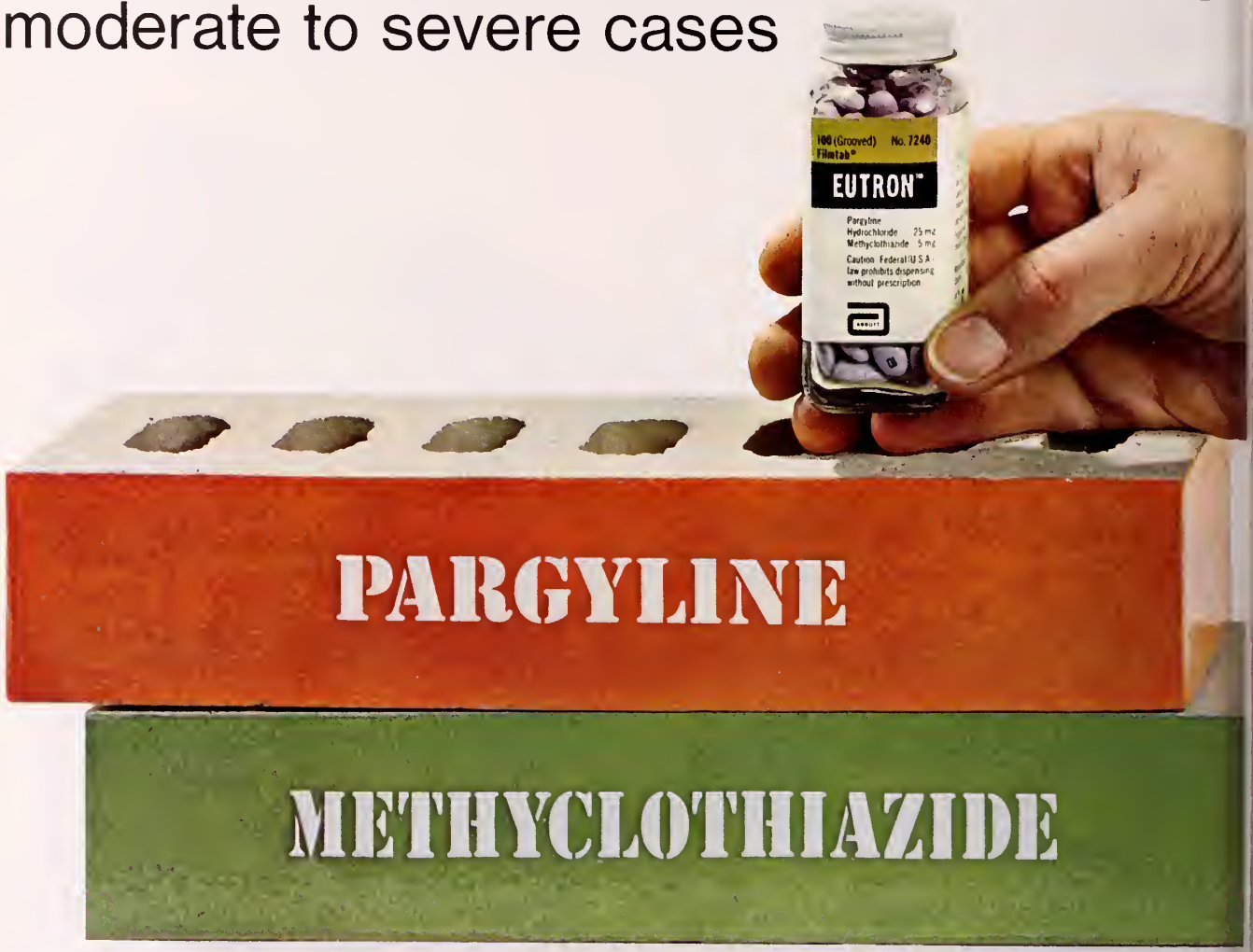
METHYCLOTHIAZIDE 5 mg. with DESERPIDINE 0.25 mg. or (FORTE) 0.5 mg.



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801094

Eutron: A unique combination for handling moderate to severe cases



Affords almost uniform diastolic reduction in all body positions

Eutron lowers diastolic pressures nearly equally, whether your patient is standing up or lying down.

Thus, in clinical trials, average *standing* diastolic readings were reduced from 112 pre-treatment to 90 post-treatment; *sitting* from 115 to 95; and *recumbent* from 112 to 94.

Note that following Eutron, the diastolic reductions were nearly alike in all three body positions.

Use Eutron for managing your moderate to severe cases. Its building blocks enhance each other; hence lesser doses often suffice.

Once a day, every day

EUTRON™

PARGYLINE HYDROCHLORIDE 25 mg.
with METHYCLOTHIAZIDE 5 mg.

MILD TO MODERATE TO SEVERE



See Brief Summary on final page of advertisement

ENDURON® | ENDURONYL®

METHYCLOTHIAZIDE

Each tablet contains
Methyclothiazide 5 mg. with
Deserpidine 0.25 mg. or 0.5 mg

Indications: Edema and mild to moderate hypertension (Enduron), and mild to moderately severe hypertension (Enduronyl). More potent agents, if added, can be given at reduced dosage.

Contraindications: Sensitivity to thiazides; severe renal disease (except nephrosis) or shutdown; severe hepatic disease or impending hepatic coma (hepatic coma due to hypokalemia has been reported in patients on thiazides). Do not use Enduronyl in severe mental depression, suicidal tendencies, active peptic ulcer, or ulcerative colitis.

Warnings: Consider possible sensitivity where there is history of allergy or asthma. If added potassium is indicated, dietary supplementation is recommended. Reserve enteric-coated potassium tablets for cautious use only when necessary, as they may induce serious or fatal small bowel lesions (stenosis with or without ulceration), cause obstruction, hemorrhage, and perforation often requiring surgery; discontinue them immediately if abdominal pain, distention, nausea, vomiting, or g.i. bleeding occurs. Neither Enduron nor Enduronyl contains added potassium.

Precautions: Use thiazides cautiously in severe renal dysfunction, impaired hepatic function or progressive liver disease; also in pregnancy (bone marrow depression, thrombocytopenia, and altered carbohydrate metabolism have been reported in certain newborn). In surgery, thiazides may reduce response to vasopressors, and increase response to tubocurarine. Antihypertensive response may be enhanced following sympathectomy. Watch for electrolyte imbalance (e.g., hyponatremia) in all patients. In hypokalemia (especially in digitalized patients) give supplemental potassium. In hypochloremic alkalosis, give supplemental chloride.

Use rauwolfias with caution in patients with history of peptic ulcer. Rauwolfias with anesthetics may produce hypotension and bradycardia. Discontinue Enduronyl two weeks before elective surgery. Consider vagal blocking agents during emergency surgery. In epilepsy, adjust anticonvulsant dosage. In electroshock, shorten stimulus strength and duration. In occasional patients with depressive tendencies, rauwolfias may precipitate severe mental depression that usually disappears when drug is stopped.

Adverse Reactions: Thiazide reaction include blood dyscrasias (thrombocytopenia with purpura, agranulocytosis, aplastic anemia); elevation of BUN, serum uric acid or blood sugar; anorexia, nausea, vomiting, diarrhea, headache, dizziness, paresthesia, weakness, skin rash, photosensitivity, jaundice, symtomatic gout, and pancreatitis. Cutaneous vasculitis in the elderly has been reported with other thiazides. Adverse effects with deserpidine are qualitatively similar to those with reserpine, but their incidence is lower. These include nasal stuffiness, abdominal cramps or diarrhea, nausea, headache, weight gain, reduced libido and potency, peptic ulcer aggravation, epistaxis, skin eruption, asthma in susceptible patients, electrolyte imbalance, excessive salivation, and a reversible Parkinson's syndrome. Excessive drowsiness, fatigue, weakness, and nightmares may signal mental depression. Thrombocytopenia, purpura, and a symptom manifested by dull sensorium, deafness, uveitis, glaucoma, and optic atrophy are rare allergic reactions to other rauwolfias. Hypotension from antihypertensive agents may precipitate angina attacks in susceptible individuals. Usually adverse reactions disappear when drug is withdrawn.

EUTRON™

Each tablet contains
Pargyline Hydrochloride 25 mg.
with Methyclothiazide 5 mg.

Indications: For treatment of patients with moderate to severe hypertension, especially those with severe diastolic hypertension. Not recommended for patients with mild or labile hypertension amendable to therapy with sedatives and/or thiazide diuretics alone. It is desirable to establish the dosage of Eutron by administering component drugs separately.

TM-TRADEMARK

Contraindications: Pheochromocytoma, advanced renal disease, increasing renal dysfunction, paranoid schizophrenia and hyperthyroidism. Hepatic coma has been reported as consequence of hypokalemia with thiazide therapy. Until further experience is gained not recommended for patients with malignant hypertension, children under 12, or pregnant patients.

Concomitant use of the following is contraindicated: other monoamine oxidase inhibitors; parenteral forms of reserpine or guanethidine; sympathomimetic drugs; foods high in tyramine such as cheese; imipramine and amitriptyline, or similar antidepressants; methyldopa. 2 week interval should separate therapy and use of these agents.

Methyclothiazide is contraindicated in patients with known sensitivity to thiazides.

Warnings: Pargyline hydrochloride is a monoamine oxidase inhibitor. Warn patients against eating cheese, and using alcohol, proprietary drugs or other medication without the knowledge of the physician. When indicated, alcohol, narcotics (meperidine should be avoided), antihistamines, barbiturates, chloral hydrate, and other hypnotics, sedatives, tranquilizers, or caffeine, may be used cautiously in reduced dosage. In emergency surgery ¼ to ⅕ the usual dose of narcotics, analgesics, and other premedications should be used avoiding parenteral administration where possible. Carefully adjust dose of anesthetics to response of patient. Withdraw pargyline two weeks before elective surgery.

Warn patients about the possibility of postural hypotension. Those with angina or coronary artery disease should not increase physical activity with an improvement in well being. Pargyline may lower blood sugar.

Avoid use of enteric-coated potassium tablets, as these may induce serious or fatal small-bowel lesions consisting of stenosis with or without ulceration. These small-bowel lesions have caused obstruction, hemorrhage and perforation frequently requiring surgery. Medication should be discontinued immediately if abdominal pain, distension, nausea, vomiting or GI bleeding occurs. These products contain no added potassium salts and if added potassium intake is desired, dietary supplementation is recommended. Coated potassium tablets should be reserved for cautious use when adequate dietary supplementation is impractical. In patients with a history of allergy or asthma the possibility of sensitivity reactions should be considered.

Precautions: Measure blood pressure while patient is standing to determine antihypertensive effect. Use with caution in hyperactive or hyperexcitable persons. Such persons may show increased restlessness and agitation. Withdraw drug during acute febrile illness. Watch patients with impaired renal function for increasing drug effects or elevation of BUN and other evidence of progressive renal failure; withdraw drug if such alterations persist and progress. Use with caution in patients with liver disease. As with all new drugs, complete blood counts, urinalyses, and liver function tests should be performed periodically. With prolonged therapy, examine patients for change in color perception, visual fields and fundi. Also reported have been: blood dyscrasias including thrombocytopenia with purpura, agranulocytosis and aplastic anemia; elevations of BUN, serum uric acid, or blood sugar. Symptomatic gout may be induced. In surgical patients thiazides may reduce response to vasopressors and increase response to tubocurarine.

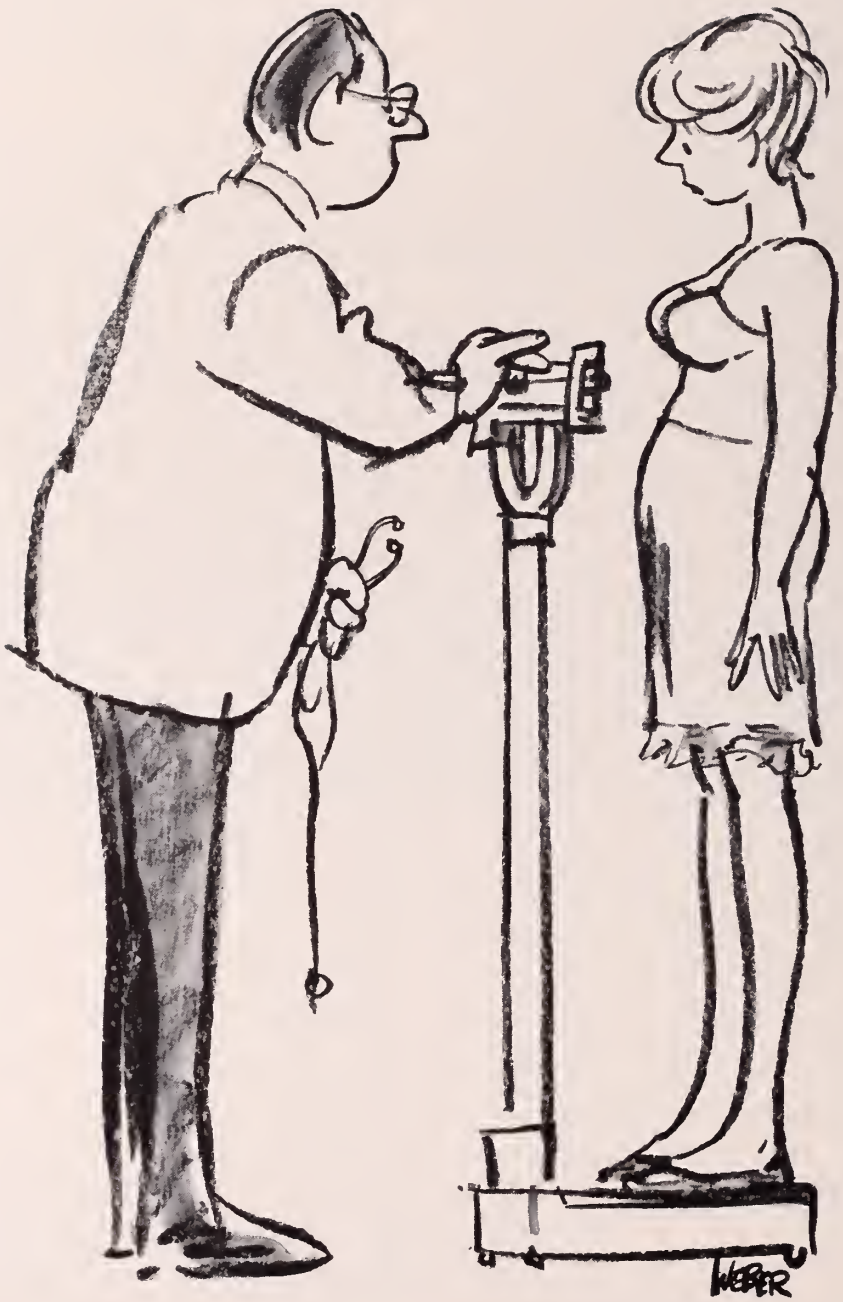
Adverse Reactions: Pargyline may be associated with orthostatic hypotension. Mild constipation, slight edema, dry mouth, sweating, increased appetite, arthralgia, nausea and vomiting, headache, insomnia, difficulty in micturition, nightmares, impotence, delayed ejaculation, rash, and purpura have been encountered with pargyline. Hyperexcitability, increased neuromuscular activity (muscle twitching) and other extrapyramidal symptoms have been reported in a few patients with reduced cardiac reserve.

During intensive or prolonged therapy, guard against hypochloremic alkalosis and hypokalemia (especially the latter if patient is on digitalis). Observe all patients for signs of hyponatremia ("low salt" syndrome).

Reported thiazide reactions also include anorexia, nausea, vomiting, diarrhea, headache, dizziness, paresthesia, weakness, skin rash, photosensitivity, jaundice, and pancreatitis. Nocturia has been observed with the combination.

801438

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Get them while they're easily reversible.

Obesity doesn't happen suddenly. This insidious process has its beginning—and the chances of reversing it are better—during the *first 10 to 15 pounds of weight gain.* When a new dietary pattern must be established, consider the adjunctive use of BAMADEX SEQUELS. Combining the proven *anorexigenic* action of d-amphetamine with the *tranquilizing* effect of meprobamate, BAMADEX SEQUELS controls appetite throughout the day, usually with a single capsule daily.

Contraindications: Dextro-amphetamine sulfate: In hyperexcitability and in agitated prepsychotic states. Previous allergic or idiosyncratic reactions to meprobamate.
Precautions: Use with caution in patients hypersensitive to sympathomimetic compounds, who have coronary or cardiovascular disease, or are severely hypertensive.

Dextro-amphetamine sulfate: Excessive use by unstable individuals may result in psychological dependence.

Meprobamate: Careful supervision of dose and amounts prescribed is advised, especially for patients with known propensity for taking excessive quantities of drugs. Excessive and prolonged use in susceptible persons, e.g. alcoholics, former addicts, and other severe psychoneurotics, has been reported to result in dependence on the drug. Where excessive dosage has continued for weeks or months, reduce dosage gradually. Sudden withdrawal may precipitate recurrence of preexisting symptoms such as anxiety, anorexia, or insomnia; or withdrawal reactions such as vomiting, ataxia, tremors, muscle twitching and, rarely, epileptiform seizures. Should meprobamate cause drowsiness or visual disturbances, reduce dosage and avoid operation of motor vehicles, machinery or other activity requiring alertness. Effects of excessive alcohol consumption may be increased by meprobamate. Appropriate caution is recommended with patients prone to excessive drinking. In patients prone to both petit and grand mal epilepsy meprobamate may precipitate grand mal attacks. Prescribe cautiously and in small quantities to patients with suicidal tendencies.
Side Effects: Overstimulation of the central nervous system, jitteriness and insomnia or drowsiness. Dextro-amphetamine sulfate: Insomnia, excitability, and increased motor activity are common and ordinarily mild side effects. Confusion, anxiety, aggressiveness, increased libido, and hallucinations have also been observed, especially in mentally ill patients. Rebound fatigue and depression may follow central stimulation. Other effects may include dry mouth, anorexia, nausea, vomiting, diarrhea, and increased cardiovascular reactivity.

Meprobamate: Drowsiness may occur and can be associated with ataxia; the symptom can usually be controlled by decreasing the dose, or by concomitant administration of central stimulants. Allergic or idiosyncratic reactions: maculopapular rash, acute nonthrombocytopenic purpura with petechiae, ecchymoses, peripheral edema and fever, transient leukopenia. A case of fatal bullous dermatitis, following administration of meprobamate and prednisolone, has been reported. Hypersensitivity has produced fever, fainting spells, angioneurotic edema, bronchial spasms, hypotensive crises (1 fatal case), anuria, stomatitis, proctitis (1 case), anaphylaxis, agranulocytosis and thrombocytopenic purpura, and a fatal instance of aplastic anemia, but only when other drugs known to elicit these conditions were given concomitantly. Fast EEG activity, usually after excessive dosage. Impairment of visual accommodation. Massive overdosage may produce drowsiness, lethargy, stupor, ataxia, coma, shock, vasomotor and respiratory collapse.

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Now...twice as much as before in each teaspoon

400,000 units of potassium penicillin V per teaspoonful

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The Present Status of Cancer Chemotherapy†

Fitzhugh Mullins, M.D., F.A.C.S., and
Condict Moore, M.D., F.A.C.S.

Louisville, Kentucky

We have reviewed recent interesting developments in the drug treatment of cancer, noting some promising findings in the chemotherapy of choriocarcinoma, Hodgkin's disease and ovarian cancer. The combination tratment of cancer with x-ray and chemotherapeutic agents and regional infusion with special reference to the liver are discussed.

THE director of the National Cancer Institute, in justifying the institute's latest budget of 35 million dollars a year in the search for anticancer drugs, said, "The treatment of cancer with surgery and radiation has gone about as far as it can go . . . the great hope for the future lies in drug therapy." To put drug treatment of cancer in perspective, however, we believe that, except for choriocarcinoma, leukemia and lymphoma, the treatment of cancer with chemical agents has been a dismal failure when compared with x-ray and surgery. Cure of the common forms of so-called solid tumors almost never occurs, and even significant relief of symptoms is less common than is generally supposed. On the other hand, the desperate condition of many patients with x-ray or surgical recurrent cancer does not allow for therapeutic indifference when some hope of prolongation of worthwhile life remains through the use of anticancer drugs.

The one great benefit from the costly and intense investigation of drug treatment of cancer during the past 15 years is much improved care for the patient with an incurable tumor. He is no longer sent home with a supply of morphine and the pronouncement that "nothing more can be done for you." Increased physician interest has given the patient increased optimism.

In the following resume we will touch on some of the more exciting or promising developments in chemotherapy of a few selected tumors.

Choriocarcinoma

The greatest advance in recent years in the treatment of malignant disease was the discovery in 1958 by Li, Hertz and Bergenstal[1] that methotrexate could bring about sustained complete remission of metastatic choriocarcinoma in women. A five year cure can now be obtained in about 70% of the cases treated on established regimens.[2] Methotrexate, in adequate doses, remains the drug of choice for choriocarcinoma. When remission of disease is not observed with methotrexate, actinomycin D is used. Occasionally when methotrexate is contraindicated actinomycin D is used initially. Data from the National Cancer Institute indicate that the overall results of therapy are not significantly different in relation to which agent is used initially. If disease appears to be eliminated with methotrexate or actinomycin D alone, the other agent is not used.

†*Presented before the Kentucky Chapter, American College of Surgeons, during the annual meeting of the Kentucky Medical Association, September 24-28, 1967. From the department of surgery, University of Louisville School of Medicine*

The preservation of childbearing function in women treated with these drugs for choriocarcinoma localized to the uterus, and even with metastatic disease, is interesting. In the former group, that is those women treated at the National Cancer Institute for disease which apparently had not metastasized, there are now some 30 instances of delivery of *normal infants at term*; 15 normal infants have been delivered in the group treated for metastatic disease. In order to avoid systemic toxicity, pelvic perfusion for the treatment of choriocarcinoma localized to the uterus is now being investigated by Bagshawe.[3] These results can be best appreciated by recalling the 90% mortality of choriocarcinoma treated by classical surgical means before the advent of drug therapy.

Combined X-Ray and Drug Therapy

Various combinations of the treatment modalities for cancer are a natural consequence of the many failures obtained by therapy with either modality alone. Two particular drugs used in conjunction with x-ray and recently reported seem worthy of comment here.

Hydroxyurea was synthesized in 1869 but only recently introduced into cancer chemotherapy. It is a specific inhibitor of DNA synthesis. A possible mechanism of interaction between x-ray and hydroxyurea was suggested by the work of Sinclair.[4, 5] The action of hydroxyurea on cancer cells may be one of destruction of relatively radioresistant cells to the S stage, i.e., the DNA synthetic stage. Further, an apparent synchronization of other cells in a relatively radiosensitive stage, the GI or postmitotic stage, occurs. The concomitant use of hydroxyurea and x-ray therapy would therefore promise to be synergistic against some cancers.

Lerner and Beckloff[6] reported promising early results in advanced head and neck cancers using concomitant treatment with this drug and x-ray followed by surgery. Twenty patients with squamous cancers were given an oral dose of 80 mgm. per kilogram every three days, and this dosage was continued indefinitely. One week after beginning the drug, x-ray treatment was started and carried to full therapeutic doses. All patients showed prompt regression of their lesions and 15 of the 20 were reported clinically free of disease for periods of two to 15 months. The most significant fact was that all patients became surgical candidates.

Earlier reports,[7, 8] have indicated a synergistic effect with the concomitant or sequential use of methotrexate and x-ray against epidermoid head and neck cancers.

We can cite the following objectives of combined drug and x-ray treatment:

(1) render inoperable patients resectable

(2) potentiate the tumor destructive effect of definitive x-ray treatment

(3) decrease operative or manipulative dissemination, and

(4) increase the number of long term survivors.

We have cautiously begun to use oral methotrexate in small daily doses when giving palliative x-ray therapy for metastatic or recurrent cancer. This combination treatment has been used in recurrent cancer of the rectum, metastatic cancer of the breast and metastatic tumor originating in lesions of the cervix or the head and neck. We have had no unexpected toxic reactions from this approach, but as with most palliative therapy it is most difficult to measure true benefit in terms of prolongation of useful life. The question which has not been answered is whether the palliative effect of combined drug and x-ray treatment could not be produced largely or entirely by radiation therapy alone. The true value of such combination therapy can be established only by a carefully controlled double-blind comparison of drug and placebo used in combination with a standardized program of radiation therapy.

Ovarian Cancer

Little effective therapy has evolved for ovarian cancer when it has metastasized throughout the abdominal cavity. Unfortunately, the majority of ovarian cancers do not reach diagnosis until this advanced state. In several large series of patients[9, 10, 11] with advanced disease treated intensively with anticancer agents, demonstrable drug effect was reported in 50% or more. Yet there is either a lack of knowledge of this mode of treatment or some reluctance to accept it because of the difficulty in evaluating response and toxicity.

In 1966 Rutledge and Burns[12] reported on 213 patients with advanced inoperable ovarian cancer who were treated with the alkylating

agent phenylalanine mustard (PAM), either alone or in combination with x-ray. This report supports chemotherapy so strongly that it deserves further comment.

Five of 33 patients who had received prior x-ray responded well to the drug for a short period only, that is, less than six months. The drug was tolerated well. PAM followed by x-ray was the treatment sequence in 37 patients. Many of these were deemed too ill for intensive irradiation; improvement in terms of tumor mass reduction and control of ascitic fluid was induced by chemotherapy. This group had the most favorable response and was felt to represent combination therapy at its best. One hundred forty-three patients, all stage III or IV (with pelvic or general abdominal metastases) received only PAM. About 50% of these patients showed a measurable regression of tumor. In the overall series of 213 patients, 138 had a good response to drug treatment, most of about six months duration. Thirteen patients had an unusually good response, and in each of these laparotomy was performed to determine if inoperable tumor had become removable or to evaluate the need for further drug treatment. No tumor was found in these 13 patients. These were fully documented advanced ovarian cancers prior to drug treatment.

The authors concluded that "this experience supports the use of chemotherapy as *standard* treatment in advanced inoperable ovarian cancer and indicates that probably the drug, rather than irradiation, should be the first type of treatment when the lesion is extensive." Our own choice of drug for this problem is chlorambucil at a daily dose of approximately 0.3 mgm./kg. of body weight until leukopenia has been induced. When the white blood cell count returns to 5000/cu. mm. the drug is resumed at a daily dose of 0.2 mgm./kg. A course of therapy lasting four weeks is attempted if the alkylating agent is tolerated satisfactorily.

Hodgkin's Disease

DeVita and Serpick reported favorable results on "Combination Chemotherapy of Advanced Hodgkin's Disease" at the 1967 meeting of the American Association for Cancer Research.[13] Their approach in this clinical experiment was similar in many respects to the newer philosophy behind the treatment of acute leukemia. Continued intensive chemotherapy even while in remission gave a greater degree and duration of response than any treatment in the past.

Forty patients, half of them with stage IV disease, were treated with four drugs. A course of therapy consisted of six cycles and utilized nitrogen mustard, vincristine, methyl hydrazine and prednisone. Drug was administered for two weeks, followed by a rest period of two weeks. The sequence was then repeated. The average full course required six months. Complete remission in Hodgkin's disease with single agents is low, usually no greater than 30%. Further, the duration of remission with single agents is in the order of eight to 10 weeks. Eighty-three per cent of the patients in DeVita and Serpick's series attained complete remission usually by the end of the third cycle of combined therapy. The duration of remission for those who entered complete remission was 12.5 months as of March 1, 1967. The study is now being expanded by a collaborative group. This report clearly provides for a more optimistic outlook in Hodgkin's disease.

Regional Infusion Therapy

Direct injection of drugs into the blood supply of a tumor was introduced in 1950 by Klopp[14] and Bierman.[15] They used intermittent injections of nitrogen mustard. This approach to raising the low therapeutic index of available drugs continues to be modified and applied with variable and limited success. One of the more carefully evaluated intra-arterial infusion methods is that of continuous antimetabolite injection. As described by Watkins and Sullivan in 1959, this is accompanied by intramuscular injections of the corresponding metabolite to reduce toxicity. In 1964, these same authors reported a series of 136 cases of all types of tumors treated by this method in which they obtained 12% complete tumor regression and 45% partial regression.[16] Fifteen of the 17 complete regressions were in head and neck tumors. To balance favorable reports such as this and others there are studies indicating high complication rates.[17, 18] These complications are technical, drug induced and systemic. Our own use of intra-arterial infusion has convinced us that many of the reported complications are preventable with careful attention to catheterization details and very close monitoring of the patient for marrow

and gastrointestinal toxicity. The true value of infusion therapy in the patient with recurrent cancer remains to be clarified from two standpoints: palliation of symptoms and absolute survival time from the onset of therapy.

The rationale of continuous drug infusion with antimetabolites involves three points: First, these drugs affect a cell only during a certain part of the mitotic cycle. DNA metabolism is interrupted principally during the interphase. Since all cells do not synchronously undergo mitosis it would seem essential to have the tumor cell population exposed continually. Second, many of the antimetabolites do not have an active transport mechanism across the cell membrane. They enter the cell by diffusion and this rate is proportional to concentration. The higher extra-cellular fluid concentration in the first capillary bed the drug traverses should therefore support a greater drug concentration in the cancer cells in contrast to sensitive distant cell populations such as marrow. Third, since most of the antimetabolites are competitive inhibitors, the systemically administered metabolite should be more effective in blocking toxic reactions.

These preferential concentration related effects would certainly seem more likely to be operative when precise regional arterial cannulation is used; e.g., external carotid catheterization via one of its branches. Intra-aortic delivery of drug would probably have significantly less likelihood of consistently producing these real or theoretical advantages.

Hepatic Infusion

Metastatic liver cancer is a totally unsolved problem in this so-called modern era. Hepatic artery infusion of anticancer drugs has been championed for several years by a few investigators. Both perfusion of the liver, as performed by Shingleton[19] and others, and infusion as practiced by Sullivan and his associates are based on the assumption that the liver tumor receives an increased blood supply. However, the premise that the hepatic artery is the sole source of this supply for the cancer cell population is based on very scanty evidence. In 1928, Segall reported in *Surgery, Gynecology and Obstetrics* a study entitled "An Experimental Anatomical Investigation of the Blood and Bile Channels of the Liver."[20] He had studied three human livers by the injection corrosion technique. One system only was injected in each of these specimens, that is, the bile ducts in one, portal vein in one and hepatic artery in the third. No bile or portal vein branches were seen in the respective tumors, but the hepatic artery injection resulted in extravasation of the material around the periphery of the tumor with radial branches entering the tumor. Recent studies by Healy[21] point out that metastatic tumors of the liver receive a decreased, not an increased, blood supply. It is clear from Healey's work that more investigation of the problem of blood supply to liver tumor is needed. This is especially pertinent to infusion of the liver since the drugs available today affect normal cells as well as cancer cells.

Gonzalez showed in 1959 that the umbilical vein in the round ligament could be easily reopened providing access to the portal vein.[22] Interest in this procedure was never great, but recently has increased for the study and treatment of diverse liver problems such as portal hypertension and abscesses.[23, 24] This simple means of access to the portal circulation also seems to offer a potentially worthwhile route for chemotherapy.[25] The technical aspects of the cannulation are simple compared to transabdominal hepatic artery intubation. The umbilical vein is exposed through a short midline epigastric incision under local or general anesthesia. It is opened, dilated and catheterized with an ample polyethylene or teflon tubing, which is then tied in place.

We have now administered chemotherapy for as long as three months through such a catheter using either fluorouracil or methotrexate. Of great importance is the ability to evaluate objectively the results of treatment by measuring tumor masses during treatment with serial x-ray porto-hepatograms. The efficacy of a specific drug may thereby be determined on objective grounds. The hepatograms obtained by injecting radiopaque water soluble media through the umbilical vein catheter are more accurate than other currently available methods for demonstrating liver tumor. Chemotherapy by infusion into the portal system is well tolerated by the patient, often on an outpatient basis. We have observed a variable degree of reduction in size of metastatic intestinal cancer in the liver. It is too early in our evaluation of this method to try to correlate survival

time with reduction in tumor size. One thing seems certain—the smaller the malignant liver lesion, the greater is its susceptibility to drug treatment.

Conclusion

While active critical appraisal of various methods of anticancer drug treatment is badly needed in larger numbers of patients, it is vital for those conducting this form of research to be mindful of the additive mortality and morbidity of the ever-present drug toxicity plus the complications of the vascular catheterization itself. The true value of drug therapy for cancer has yet to be defined, but it has a sound basis in theory. In brief, it is systemic treatment for systemic disease rather than blind local therapy directed against scattered foci.

References

1. Li, M. C., Hertz, R., and Bergenstal, D. M.: Therapy of Choriocarcinoma and Related Trophoblastic Tumors with Folic Acid and Purine Antagonists, *New Eng. J. Med., 259*: 66, 1958.
2. Karnofsky, D. A.: Problems and Pitfalls in the Evaluation of Anticancer Drugs, *Cancer,* 18: 1517, 1965.
3. Ross, G. T.: Personal communication, August, 1967.
4. Sinclair, W. K.: Hydroxyurea: Differential Lethal Effects on Cultured Mammalian Calls During the Life Cycle, *Science, 150:* 1729, 1965.
5. Sinclair, W. K., and Morton, R. A.: X-Ray and Ultraviolet Sensitivity of Synchronized Chinese Hamster Cells at Various Stages of the Cell Cycle, *Biophys. J., 5:* 1, 1965.
6. Lerner, H. J., and Beckloff, G. L.: Combined Chemotherapy and Radiotherapy, Preliminary Results of Clinical Trial of Hydroxyurea and X-Irradiation in the Treatment of Epidermoid Cancers of the Head and Neck, *Am. Surg., 33:* 165, 196[illegible].
7. Friedman, M., and Daly, J. F.: Combined Irradiation and Chemotherapy in the Treatment of Squamous Cell Carcinoma of the Head and Neck, *Am. J. Roentgen., 90:* 246, 1963.
8. Kligerman, M. M., Hellman, S., von Essen, C. F., and Bertino, J. R.: Sequential Chemotherapy and Radiotherapy. Preliminary Results of Clinical Trial with Methotrexate in Head and Neck Cancer, *Radiology, 86:* 247, 1966.
9. Burns, B. C., Jr., Rutledge, F., and Gallager, H. S.: Phenylalanine Mustard in the Palliative Management of Carcinoma of the Ovary, *Obst. & Gynec., 22*: 30, 1963.
10. Lebherz, T. B., Huston, J. W., Austin, J. A., and Boyce C. R.: Sustained Palliation in Ovarian Cancer, *Obst. and Gynec., 25:* 475, 1965.
11. Wilshaw, E.: Chlorambucil in the Treatment of Primary Adenocarcinoma of the Ovary, *J. Obst. Gynaec. Brit. Comm., 72:* 586, 1965.
12. Rutledge, F., and Burns, B. C.: Chemotherapy for Advanced Ovarian Cancer, *Am. J. Obst. Gynec., 96:* 761, 1966.
13. De Vita, V., and Serpick, A.: Combination Chemotherapy of Advanced Hodgkin's Disease, *Proc. Am. Assoc. Ca. Res., 8:* 13, Mar., 1967.
14. Klopp, C. T., et al.: Fractionated Intra-Arterial Cancer Chemotherapy with Methyl Bisamine Hydrochloride. Preliminary Report, *Ann. Surg., 132:* 811, 1950.
15. Bierman, H. R., et al.: Effects of Intra-Arterial Administration of Nitrogen Mustard, *Am. J. Med., 8:* 535, 1950.
16. Watkins, E., Jr., and Sullivan, R. D.: Cancer Chemotherapy by Prolonged Arterial Infusions, *Surg. Gynec. Obst., 118:* 3, 1964.
17. Tindel, S.: Intra-Arterial Chemotherapy for Recurrent Neoplasms, *J.A.M.A., 200:* 913, June 12, 1967.
18. Rogers, L. S.: Cancer Chemotherapy by Continuous Intra-Arterial Infusion: Experience of the Veterans Administration Surgical Adjuvant Cancer Chemotherapy Infusion Study Group, *Ca, 17:* 1365, 1964.
19. Shingleton, W. W., Parker, R. T., and Mahaley, S.: Abdominal Perfusion for Cancer Chemotherapy, *Ann. Surg., 152:* 583, 1960.
20. Segall, H. N.: An Experimental Anatomical Investigation of the Blood and Bile Channels of the Liver, *Surg. Gynec. Obst., 37:* 152, 1923.
21. Healey, J. E.: Vascular Patterns in Human Metastatic Liver Tumors, *Surg. Gynec. Obst., 120:* 1187, 1965.
22. Gonzalez-Carbalhaes, O.: Hepatoportografia por via Umbilical, *Revista Sanidad Militar Mexico, 12:* 42, 1959.
23. Bayly, J. H.: The Use of the Umbilical Vein in the Diagnosis of Upper Gastrointestinal Bleeding, *Am. J. Gastroent., 41:* 235, 1964.
24. Piccone, V. A., and LeVeen, H. H.: Transumbilical Portal Decompression, *Surg. Gynec. Obst., 125:* 66, 1967.
25. Kessler, R. E., and Ramos-Yordan, F.: Evaluation of Anticancer Drugs by Umbilical Vein Hepatography, *Ca, 20:* 319, 1967.

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Metastatic Tumors of the Brain
Their Diagnosis and Surgical Considerations

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Increasing facility and frequency of diagnosis bring more metastatic brain tumors to surgical consideration. Removal of a solitary lesion can resnlt in dramatic improvement of symptoms, althongh longevity may not be favorably altered.

ONE of the most challenging problems that confronts a physician is the treatment of metastatic tumors of the brain. What could be more disconcerting than treatment of a metastatic lesion, when the primary disease might be incurable? Grant, in 1925, reviewing his experiences concluded that "surgery, whether radical or palliative, is of no ultimate benefit to these patients insofar as prolongation of life is concerned."[9] In spite of the baneful implications, increasing facility of diagnosis, accumulation of statistical knowledge, and advances in surgical application call for an assessment of fatalistic thinking.

Incidence and Etiology

Incidence of metastatic brain lesions is reported to range from a nominal figure of 3.2%[4] of all brain tumors to 17.9%[1], undoubtedly reflecting selection and variation in study material, autopsy figures generally exceeding those quoted in surgical reviews.[3] Bailey found primary brain tumors in 1% of his autopsy material, metastatic in 0.5%.[2]

Peak age incidence, as expected, falls in the fifth and sixth decades, and males are more commonly affected[3,11,21] reflecting preponderance of pulmonary malignancy as the most common primary site.[1,3,7,8,13,17] Statistical breakdown of tumors contributing to brain metastases is presented in the graph. (Table 1)

Sarcomas seem to metastasize to the brain more readily than carcinomas, but due to lower overall incidence, are not as frequently encountered.[5, 9, 18, 21]

Although a nervous system lesion in a cancer patient is generally accepted as an evident member of a constellation of metastatic lesions, survey of the literature indicates that metastases to the brain are solitary in from 30% to 70% of reported cases, regardless of primary site or degree of anaplasia.[1,3,8,12,17,18,19]

Inasmuch as there are no lymphatics in the brain, the commonly accepted mode of spread is by tumor emboli in the blood stream[8], although this theory is difficult to sustain in absence of lung metastases.[5] Direct extension from adjacent lesions in the nasopharynx, or by invasion of the subarachnoid space, and dissemination via cerebrospinal fluid, are also likely routes.[18] Spread by paradoxical tumor emboli is highly theoretical. Bailey considers the theory of intracranial metastases by the paravertebral venous complex of Batson as illogical.[2]

Statistically, there is no propensity of one hemisphere to be favored over the other, although the cerebrum is twice to three times more commonly affected by metastatic disease than the cerebellum.[11,19] There seems to be a predilection for the tumors to locate in the posterior Sylvian fissure, thought to be on basis of blood flow pressure principles in the middle cerebral artery and its branches.[10]

Diagnosis

A patient with cancer history, suddenly developing neurologic symptoms, should be suspected of harboring brain metastasis. Not infrequently, it is the brain lesion that produces the initial symptoms, and for this reason, in 30% to 60% of cases, diagnosis of metastatic tumor is not made before operation.[11,12,19] The

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TABLE I

	Lung	Breast	Kidney	G. I.	Skin Squamous	Skin Melanoma	Generative	Thyroid	Other	Unknown	Total
Baker[1]	24	24	9	13	9		14	1	3		97
Busch[3]	36	14	8	7	7		5	1		28	106
Earle[5]	24	6	1	3		8	4	1	29	3	79
Furlow[7]	18	6	2	5						6	37
Globus[8]	19			6			1	4	3		33
Lee[11]	36	14	2	7			2	2	3	10	75
Meagher[13]	20	14	1	3	3				3	14	57
Simionescu[17]	74	45	16	7	12			4	14	23	195
Stortebecker[18]	25	11	32			12			78		158
Tom[19]	18	13	3	11		7	1		14	15	82
TOTAL	294	146	74	62	31	27	27	13	146	99	919
	32%	19%	7.9%	6.7%	5.8%	2.9%	2.9%	1.4%	15.9%	10.7%	

*Percentages have been rounded off to the nearest tenths

time element between discovery or treatment of primary, and onset of neurologic disturbance, may further obscure the clinical picture. In breast and kidney malignancies, 10 to 12 year latency periods are not uncommon.[18]

Symptoms of headache and psychic changes are out of proportion and more profound in metastatic than primary brain tumors.[1,2,9,11,17,18] Jacksonian seizures are common (around 28%)[18] but papilledema, visual disturbances, vertigo, aphasia and pareses are not unique. Abruptness of symptoms may masquerade a stroke.

Chest x-ray probably comprises the single, most valuable, diagnostic aid in differentiating the nature of the lesion and should be obtained in all elderly brain tumor suspects. Sedimentation rate has been found to be significantly elevated in 70% to 75% of the patients.[17] Higher sedimentation rates seem to be linked with multiple metastases.[18] Cerebrospinal fluid protein is usually elevated, particularly if the lesion is near the surface and supratentorially located,[16, 18] but this finding is not specific and contributes little in differentiating primary from metastatic brain tumor.

Electroencephalograms are focally abnormal in over 50% of cases[17] and, along with contrast studies, are valuable in differentiating single from multiple brain lesions.

Brain scans have achieved an important status as a diagnostic aid because of the high degree of accuracy (70%-90%) and absence of discomfort and morbidity.[20, 14] Brain scans, however, are not specific to neoplastic disease and do not demonstrate anatomical relationships. In addition to the 60% to 75% overall accuracy in demonstrating the brain lesions, cerebral angiograms show metastatic tumors best in the later arterial-early venous phase and usually appear as a halo shaped blush with an avascular center or concentrically arranged bundle of vessels. The major vessels are frequently distorted, and occasionally a larger branch, irrigating the tumor, is seen.[6] Excretory urogram, obtained at the time of angiography, is a valuable screening test in assaying kidney as the possible site of the primary.

Air contrast studies (pneumoencephalograms or ventriculograms) are useful in surveying the entire cranial contents[7, 17] but carry a recognizable morbidity and should only be performed with a surgical set-up in readiness.

Considerations in Surgical Treatment

There is general agreement among authors that presence of multiple intracranial lesions places the patient beyond surgical help.[3, 7] General debility and neurologic symptoms of less than six weeks carry a poor prognosis. On the other hand, latency between discovery of primary and onset of neurologic symptoms is attended with longer survivals, and prognosis is better in patients in whom the primary lesions have been treated or removed.[18] If brain metastasis is discovered concomitantly with the primary lesion, it is probably advisable to treat

the brain lesion first, since it is more likely to cause sudden demise of the patient. Operative mortalities of 20% to 38% have been reported,[4, 18] but recent mortalities of 5.4% to 18% are probably more realistic, reflecting current advances in more accurate blood replacement, fluid management and control of cerebral edema.[7, 11]

The success of surgical treatment of metastatic tumors of the brain is uncertain, due to individual bias, retrospective and non-randomized nature of the studies. The majority of people with bronchogenic tumors succumb within six months.[3,11,12,17] Not uncommonly, survival periods of several productive years, particularly in breast and kidney tumor groups, have been reported.[4, 7, 12, 15]

The most decisive reason for surgical intervention is frequent, dramatic relief of headache and other symptoms that follow removal of these tumors.

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Bibliography

1. Baker, A. B.: Metastatic Tumors of the Nervous System. *Arch. Path.* 34: 495-537, 1942.
2. Bailey, P.: *Intracranial Tumors.* Springfield, Charles C. Thomas, 1933. 467 pp. See pp. 11 and 355).
3. Busch, E. and Christiansen, E.: *Treatment of Tumors Metastatic to the Brain in Treatment of Cancer and Allied Diseases.* Pack, G. T. and Ariel, I. M., Ed. New York: Hoeber and Harper, 1959, 2nd ed. 315 pp. (see pp. 212-223).
4. Cushing, H. W.: *Intracranial Tumours,* Springfield, Charles C. Thomas, 1932. 150 pp. (see 105-113).
5. Earle, K. M.: Metastatic Brain Tumors, *Dis. Nerv. System.* 16:39-48, 1953.
6. Ethelberg, S. and Vaernet, K.: The Angiographic Configuration of Intracerebral Metastatic Tumors. *Radiology.* 61: 39-48, 1953.
7. Furlow, L. T.: Metastatic Tumors of the Brain. *Clin. Neurosurg.* 7:63-78, 1961.
8. Globus, J. H. and Meltzer, T.: Metastatic Tumors of the Brain. *Arch. Neurol. & Psychiat.* 48: 163-226, (Aug.) 1942.
9. Grant, F. C.: Concerning Intracranial Malignant Metastases. *Ann. Surg.* 84: 635-646, (Nov.) 1927.
10. Kindt, G. W.: The Pattern of Localization of Cerebral Metastatic Tumors. *Neurosurg.* 21: 54-57, 1964.
11. Lee, H. J.: Metastatic Carinoma in the Brain. *Univ. Mich. Med. Bullet.* 23: 211-217, 1957.
12. Livingston, K. E., Horrax, G., and Sachs, E. Jr.: Metastatic Brain Tumors, *Surg. Clin. N. Amer.* 805-810, (June) 1948.
13. Meagher, R. Eisenhardt: Intracranial Carcionomatous Metastases, *Ann. Surg.* 93:132-140 (Jan.) 1931.
14. Mishkin, F. S.: Clinical Brain Scanning with 203 Hg. Neohydrin. *J. Indiana Med. Assn.* 59: 1435-1439 (Dec.), 1933.
15. Oldberg, E.: Surgical Considerations of Carcinomatous Metastases to the Brain. *JAMA,* 101: 1458-1466, (Dec.), 1933.
16. Shannon, E. W. and Morgan, C .W., Jr.: The Cerebrospinal Fluid Protein in Metastatic Brain Tumors. *New Engl. J. Med.* 231: 874-875 (Dec. 28), 1944.
17. Simionescu, M. D.: Metastatic Tumors of the Brain. A Followup Study of 195 Patients with Neurosurgical Considerations. *J. Neurosurg.* 17: 361-373, 1960.
18. Stortebecker, T. P.: Metastatic Tumors of the Brain from a Neurosurgical Point of View. A Followup Study of 158 Cases. *J. Neurosurg.* 11: 84-111, 1954.
19. Tom, M. I.: Metastatic Tumors of Brain. *Canad. Med. Assn. J.* 54: 265-268 (Mar.), 1946.
20. Wang, Y., Shea, F. J., Rosen J. A.: Comparison of the Accuracy of Brain Scanning and Other Procedures Used for Brain Tumor Detection. *Neurology* 15: 1117-1119 (Dec.), 1965.
21. Zulch, K. J.: *Brain Tumors, Their Biology and Pathology.* New York. Springer, 1965 2nd Ed. 326 pp. (see pp. 252-255).

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A Short Term Survey of Mycobacteria Isolated From Kentucky Tuberculosis Hospital Patients†

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In a representative sample of positive cultures for M. tuberculosis from the six Kentucky state tuberculosis hospitals, only 6% of the cultures yielded growth for atypical mycobacteria and 8.6% were resistant to the three antituberculosis drugs—isoniazid, streptomycin, and PAS.

DRUG resistance and presence of atypical mycobacteria in humans are significant barriers to effective control and eradication of tuberculosis in the community[1]. Furthermore, skin test surveys have shown a relatively high infection rate with atypical mycobacteria in some areas, especially the southeastern parts of the United States[2]. A previous communication[3] reported the prevalence of both antituberculosis drug-resistant and atypical mycobacteria in one of the six Kentucky state tuberculosis hospital population groups. Over a 12-month period, 7% of the cultures studied were atypical mycobacteria. In 2.8% of this patient population, atypical mycobacteria were considered to be the etiologic agent. Therefore, it is of considerable public health interest to investigate the prevalence of pulmonary disease due to atypical mycobacteria in the entire Kentucky state tuberculosis hospital population. In the summer of 1965, a tuberculin skin test survey was conducted throughout the six state tuberculosis hospitals in conjunction with a bacteriological study of sputum or gastric washing specimens from the hospitalized patients.

Materials

The mycobacterial cultures obtained from hospitalized patients at the six tuberculosis hospitals during the period July 1-31, 1965 were studied intensively at the laboratory of the department of community medicine, University of Kentucky College of Medicine.

The location of the six tuberculosis hospitals and the districts served are shown in Figure 1. The number of cultures studied per patient ranged from one to five with a mean of 1.5 cultures per patient. However, from more than two-thirds of the patients, only one culture was studied. From 188 patients 274 cultures were examined. The age, race, and sex distribution of the patients is shown in Table 1. Of the 274 cultures, 266 (97.08%) were isolated from sputum specimens, seven were isolated from gastric lavages, and one was isolated from a speciment marked "abscess".

Methods

The primary isolation of mycobacteria was carried out at the laboratories of the six district hospitals. All of the six laboratories used Löwenstein-Jensen medium and one used ATS and 7H10 medium in addition. The concentration methods used were sodium hydroxide at four laboratories, trisodium phosphate at one laboratory, and trisodium phosphate or N-acetyl-cysteine at one laboratory. In the laboratory of the department of community medicine, University of Kentucky College of Medicine, all cultures were tested for drug susceptibility against isoniazid, para-aminosalicylic acid, and streptomycin on Middlebrook's 7H10 medium in quadrant plates. The drug

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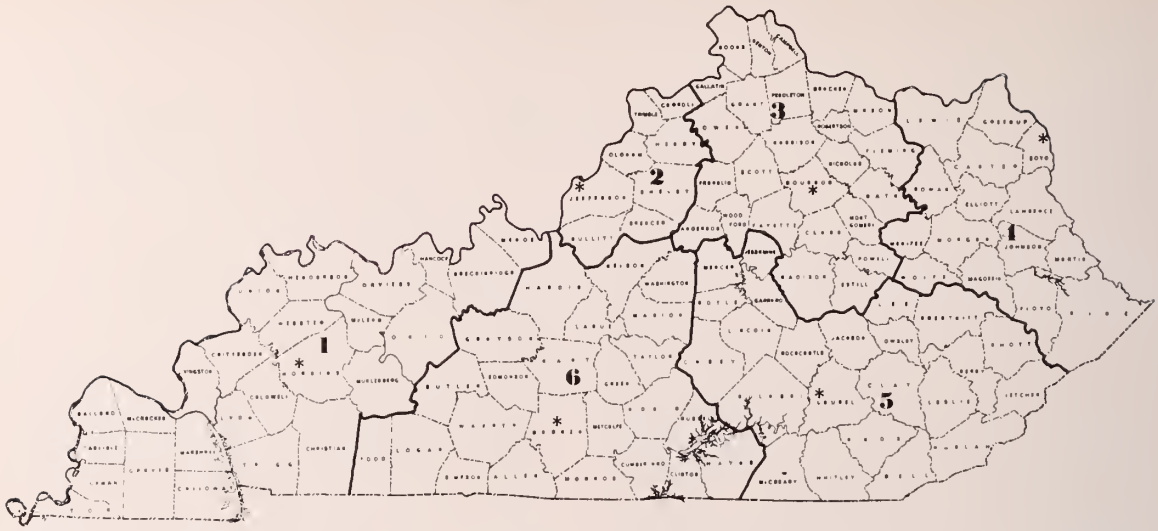


FIGURE 1. Districts of Kentucky served by the six Tuberculosis Hospitals and the locations of the hospitals. 1. Madisonville 2. Louisville 3. Paris 4. Ashland 5. London 6. Glasgow

concentrations used were isoniazid 0.2, 1.0, and 5.0 micrograms per milliliter; PAS 1.0, 5.0, and 25.0 micrograms per milliliter; and streptomycin 1.0, 10.0, and 100.0 micrograms per milliliter. Cultures were graded as susceptible, partially resistant, or resistant. Susceptible was defined as 1 + growth on INH 0.2 microgram per milliliter and less than 20 colonies on PAS or SM 1.0 microgram per ml. Resistant was defined as 2 + or more growth at 1.0 microgram per milliliter INH, 5.0 microgram per milliliter PAS, and 10.0 microgram per milliliter SM or any growth at the highest drug concentration.

All cultures were tested for catalase activity, niacin production and pigment formation. Standard procedures as outlined in the *Handbook on Tuberculosis Laboratory Methods*[4] were used. All fast-growing organisms were tested by the phenolphthalein sulfatase test. The neutral red test was performed on all cultures of niacin-negative mycobacteria. Results of the above tests were used for grouping the mycobacterial cultures according to Runyon's classification.

Results

Of the 274 cultures tested, 257 (93.8%) were *M. tuberculosis var. hominis*. Seventeen cultures (6.2%) were atypical mycobacteria of which four were photochromogens, eight were scotochromogens, three were non-chromogens, and two were *M. fortuitum*. All cultures of atypical mycobacteria were isolated from sputum.

Of the 257 cultures of *M. tuberculosis*, 155 (60.31%) were isoniazid susceptible, seven (2.72%) were partially resistant, and 95 (36.96%) were resistant. With PAS susceptibility testing, 166 cultures (64.6%) were PAS

TABLE I

Age, Race, and Sex Distribution of All Patients

	WHITE			NEGRO			TOTAL		
Age	Male	Female	Total	Male	Female	Total	Male	Female	Total
1-19	3	2	5		1	1	3	3	6
20-29	9	7	16		2	2	9	9	18
30-39	10	19	29	2	2	4	12	21	33
40-49	31	10	41				31	10	41
50-59	22	7	29	5		5	27	7	34
60-64	13	3	16	4		4	17	3	20
65-over	21	10	31	3		3	24	10	34
TOTAL	109	58	167	14	5	19	123	63	186*

*Two patients for whom the age could not be established are omitted from this table.

TABLE II

Drug Susceptibility Patterns of Cultures of M. Tuberculosis Var. Hominis

INH	PAS	SM	Number	INH	PAS	SM	Number	INH	PAS	SM	Number
S	S	S	137	P	S	S	2	R	S	S	9
S	S	P	6	P	S	P		R	S	P	5
S	S	R	1	P	S	R		R	S	R	6
S	P	S	4	P	P	P	1	R	P	S	4
S	P	P		P	P	P	1	R	P	P	6
S	P	R		P	P	R		R	P	R	1
S	R	S	6	P	R	S		R	R	S	13
S	R	P		P	R	P	2	R	R	P	29
S	R	R	1	P	R	R	1	R	R	R	22

INH	S	155	60.31%
	P	7	2.72%
	R	95	36.96%
PAS	S	166	64.59%
	P	17	6.61%
	R	74	28.79%
SM	S	176	68.48%
	P	49	19.07%
	R	32	12.45%

S = Susceptible

P = Partially Resistant

R = Resistant

sensitive 17 (6.6%) were partially resistant, and 74 (28.79%) were resistant. The susceptibility against streptomycin was 176 (68.48%) susceptible, 49 (19.07%) partially resistant, and 32 (12.45%) resistant. Against all three drugs, 137 cultures (53.31%) were susceptible and 22 (8.56%) were resistant, while the remaining 98 cultures (39.13%) varied in their drug susceptibility. The patterns of drug susceptibility of the 257 cultures of *M. tuberculosis var. hominis* are summarized in Table II.

If one considers any growth on 0.2 microgram of isoniazid per milliliter as indication of beginning isoniazid resistance[5], only 132 (51.36%) of the cultures of *M. tuberculosis var. hominis* could be accepted as fully isoniazid susceptible.

All 155 isoniazid susceptible cultures were catalase positive. Of the seven isoniazid partially resistant cultures, five were catalase positive and two were catalase negative. Four of 95 isoniazid-resistant cultures showed a weak, delayed catalase reaction while the rest were negative. All 257 cultures of *M. tuberculosis* were niacin positive and showed good cording.

All 17 cultures of atypical mycobacteria were catalase hyperactive and niacin negative. Of the four photochromogens, three were resistant to isoniazid and one was partially resistant. Against PAS, three were resistant and one was susceptible. Three cultures were streptomycin-resistant and one was partially resistant. All eight scotochromogens were resistant to both isoniazid and PAS. Six scotochromogens were streptomycin resistant and two were partially resistant. All three non-chromogens were resistant to isoniazid, PAS and streptomycin. The two cultures of *M. fortuitum* were resistant to isoniazid and streptomycin; one was PAS resistant and one was PAS susceptible.

In the phenolphthalein sulfatase test, the two cultures of *M. fortuitum* were positive while the photochromogens, scotochromogens, and non-chromogens were negative. In the neutral red test, three photochromogens were negative and one was positive. Of the scotochromogens, four were neutral red positive and three were neutral red negative. All three non-chromogens were neutral red negative. Of the two *M. fortuitum* cultures, one was neutral red positive and the other was neutral red negative.

The age, race, and sex distribution of the patients from whom atypical mycobacteria were isolated is shown in Table III.

When the adult hospital population (patients with positive cultures) was compared to the general adult population of Kentucky, it was found that a higher percentage of older people were in the hospital group than in the population at large. (See Figure 2.)

Discussion

It is generally found that the prevalence of infection with atypical mycobacteria is greater

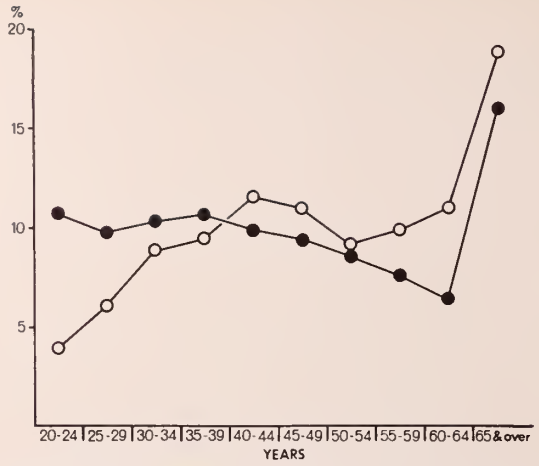


FIGURE 2. Comparison of adult general population of Kentucky (black circles) and hospital study population (hollow circles)

in the southeastern United States where the isolation of these organisms from sputum specimens is also more frequent. On the basis of laboratory surveys of tuberculosis populations, there appears to be a wide variation in the prevalence of atypical mycobacteria throughout the world although very little is known about the real distribution of atypical mycobacteria in nature. Since atypical mycobacteria may play an important role in drug resistant hospital problems, the pattern of mycobacterial disease in humans should be established to provide a baseline for the hospitalized tuberculosis patients in Kentucky.

The observation of 6.2% atypical mycobacterial cultures found in this short-term study of patients in the six tuberculosis hospitals compares well with earlier findings of 7% of atypical mycobacteria in a one-year study of cultures from one Kentucky tuberculosis hospital. Isolations of non-chromogens were less frequent than reported for the southeastern United States. The data seem to indicate that atypical mycobacteria, as well as human mycobacteria, are more frequently isolated from the older male. (See Table III)

To consider atypical mycobacteria as etiologic agents, it is required that the organisms be isolated repeatedly from the same patient. It is difficult to analyze our data in this respect since only one culture was obtained from more than two-thirds of the patients in this short-term study. Five patients had cultures of *M. tuberculosis var. hominis* and an atypical mycobacterium. In only two instances were atypical mycobacteria isolated twice from the same patient: one a photochromogen and the other a scotochromogen which is generally not accepted as the etiologic agent in pulmonary disease. From a third patient, a non-chromogen was isolated once. This patient, however, had cultures of non-chromogens in the previous study.

On the basis of this study, it appears at the present time that atypical mycobacteria as causative agent of pulmonary disease do not present a major problem in Kentucky. The prevalence of infection of atypical mycobacteria as measured by skin testing appears to be considerably higher in this state than the prevalence of pulmonary disease as measured by hospitalized patients excreting atypical mycobacterial organisms. Although skin test surveys were carried out mainly in younger population groups, tuberculosis patients are predominantly in older age groups.

Over 50% of all cultures were fully susceptiable to isoniazid, PAS, and streptomycin, while only 8.6% were completely resistant. Since

(Continued on page 306)

TABLE III

Age, Race, and Sex Distribution Of Patients From Whom Atypical Mycobacteria Were Isolated

	WHITE			NEGRO			TOTAL		
Age	Male	Female	Total	Male	Female	Total	Male	Female	Total
20-29	1		1				1		1
30-39				1		1	1		1
40-49	4	1	5				4	1	5
50-59		1	1	1		1	1	1	2
60-69	3	2	5	1		1	4	2	6
TOTAL	8	4	12	3		3	11	4	15

The patient from whom a photochromogen was isolated twice is a 46-year-old white male, and the one from whom a scotochromogen was isolated twice is a 49-year-old white male.



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Campbell has prepared a sensible plan for weight control based on ordinary eating patterns. The plan consists of a patient instruction booklet and a set of menus which provide approximately 1,200 calories daily. The menus are balanced to provide the minimum daily requirements of nutrients.



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Hypotonic Duodenography

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• in diagnosis

• in treatment

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calms the gastrointestinal tract

For fifteen years Pro-Banthine has been the most widely used anticholinergic agent in disorders of gastrointestinal motility and gastric hypersecretion. More recently Pro-Banthine has reestablished its pharmacologic effectiveness in diagnostic procedures using intragastric fibroscopy and hypotonic roentgenography.

How the X-rays were taken

In the hypotonic duodenograph[1,2] reproduced above, the gastrointestinal tract was relaxed with Pro-Banthine. The duodenum was intubated. Pro-Banthine in a dose of 60 mg. intramuscularly was used to assure prompt aperistalsis and double-contrast visualization was achieved with ordinary barium and air.

The same pharmacologic efficiency has proved of pronounced value in such conditions as: *peptic ulcer, pylorospasm, biliary dyskinesia, functional hypermotility and irritable colon.*

Contraindications: Glaucoma or severe cardiac disease.

Precautions: Since varying degrees of urinary hesitancy may occur in elderly males with prostatic hypertrophy, this should be watched for in such patients until they have gained some experience with the drug. Although never reported, theoretically a curare-like action may occur with possible loss of voluntary muscle control. Such patients should receive prompt and continuing artificial respiration until the drug effect has been exhausted.

Side Effects: The more common side effects, in order of incidence, are xerostomia, mydriasis, hesitancy of urination and gastric fullness.

Dosage: The maximal tolerated dosage is usually the most effective. For most *adult* patients this will be four to six 15-mg. tablets daily in divided doses. In severe conditions as many as two tablets four to six times daily may be required. Pro-Banthine (brand of propantheline bromide) is supplied as tablets of 15 mg., as prolonged-acting tablets of 30 mg. and, for parenteral use, as serum-type vials of 30 mg. The parenteral dose should be adjusted to the patient's requirement and may be up to 30 mg. or more every six hours, intramuscularly or intravenously.

(1) Bilbao, M. K.; Frische, L. H.; Rösch, J., and Dotter, C. T.: Hypotonic Duodenography, Scientific Exhibit, Radiological Society of North America, Chicago, Nov. 27–Dec. 2, 1966.

(2) Bilbao, M. K.; Frische, L. H.; Dotter, C. T., and Rösch, J.: Hypotonic Duodenography, Radiology *89:*438-443 (Sept.) 1967.

SEARLE

Research in the Service of Medicine



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Costs For Custodial Care in a Hospital or Extended Care Facility Under Part A or Part B of Title XVIII Are Not a Liability of the Government Under the Medicare Act

Paul J. Parks, M.D., chairman of the Kentucky Medical Association Advisory Committee on Title XVIII, following a meeting with representatives of the Part A Intermediary of Kentucky, requested that the intermediary, Kentucky Blue Cross, prepare this much needed article explaining the custodial care guidelines developed by the Bureau of Health Insurance. *The Editors*

SECTION 1862 of Public Law 89-97 Medicare states . . . "Notwithstanding any other provision of this title, no payment may be made under part A or part B for any expenses incurred for items or services — . . . where such expenses are for custodial care; . . ."

The widespread and often diversified use of the term "custodial care" by physicians, other medical or paramedical personnel and laymen make it difficult to define with any degree of precision. This term is not really descriptive and has a variety of meanings, which are readily adaptable to different interpretations in particular cases.

For this reason, the Bureau of Health Insurance did not attempt to develop an abstract definition of "custodial care" for Medicare purposes. Attention was focused on specific identification of the type of particular service or level of care not intended to be covered under the program.

Intent of Congress

There can be no doubt that Congress in enacting Public Law 89-97 intended to provide beneficiaries with protection against medical costs arising from an illness or injury which requires the type of care that necessitates the continuing attention of trained medical and paramedical personnel.

This intent is reflected in the law and in the "Conditions of Participation" for hospitals and extended care facilities. They place great emphasis on the availability of a wide range of specialized medical services within the institution.

The kind of care which Congress *did not* intend to cover and which is classified as "custodial care" is the type of care designed essentially to assist the individual in meeting his activities of daily living—i.e., services which constitute personal care such as help in walking and getting in or out of bed, assistance in bathing, dressing, feeding, and using the toilet, preparation of special diets, and supervision over medication which can usually be self-administered—and which does not entail or require the continuing attention of trained medical or paramedical personnel.

Custodial Care Guidelines

The Bureau of Health Insurance has developed custodial care guidelines, under which the intermediary is obligated to operate, to establish criteria to determine if the cost of the patient care is a liability of the Medicare Program or the patient. In brief the guidelines contain the following points:

—The KEY to determining whether the patient is receiving custodial care is not the restorative potential of the patient, but the *level of care* which his condition requires.

—The BASIC CONSIDERATION to be made in applying the custodial care guidelines is whether the care required by the patient necessitates the *continuing* attention of trained medical or paramedical personnel.

—The QUESTION in each case to assist in determining if Medicare is liable for the cost is whether the patient's condition requires *skilled services.*

—SKILLED SERVICE is defined by the guidelines as one which must be furnished by or under supervision of trained medical or paramedical personnel if the safety of the patient is to be assured and the medically desired result is to be achieved. A service would not be classified as a skilled service merely because it is performed by a trained medical or paramedical person.

If a service is such that it can safely and adequately be performed by the average, rational, nonmedical person, without the direct supervision of trained medical or paramedical personnel, it must be regarded for purposes of the guidelines as a nonskilled service without regard to who actually provides the service.

—The PRIMARY PURPOSE OF CARE is a factor in determining the liability for the cost. If a patient's condition is such that it is medically necessary to have the skilled services of a nurse available to him at all times, the need for this service alone would be sufficient to justify a finding that the primary purpose of the total care is the provision of this skilled service.

If, on the other hand, the patient does not require any nursing services, it will usually be found that the primary purpose of the total care furnished is to assist him in meeting the activiites of daily living.*

It should be recognized that even when a determination of custodial care is reached, it is possible that only a portion of the stay in the institution has been custodial. Therefore, in such cases a second determination will usually have to be made as to when the care received by the patient became primarily custodial in nature.

The Medicare Program, through the custodial care guidelines, is not attempting to prescribe the care to be given to a Medicare beneficiary, but to determine if the cost for the level of care received by a beneficiary in a hospital or extended care facility is a liability of the Medicare Act.

Status of Physician Services

The guidelines recognize readily that services which a physician performs for a patient would constitute a skilled service. A finding that the care received is custodial care would not, in itself, require the disallowance of a request for reimbursement filed under part B of Title XVIII for the physician services. It is understood that many individuals who require only custodial care need to have periodic visits from a physician for purposes of having their medical status assessed for changes in the type of care received. Thus periodic visits by a physician would not necessarily justify a finding that total care furnished an individual is not custodial care.

Intermediary Determinations and Procedures

The intermediary is required by contract to determine if the level of care received is a liability of the Medicare Program and if payment should be disbursed for the cost of this care. The guidelines do not provide an intermediate level between covered care and custodial care. It is the desire of the intermediary in Kentucky to work closely with physicians, hospitals and extended care facilities to insure that fair decisions can be made on behalf of the patient and within the scope of the law.

The custodial care guidelines were discussed before the Kentucky Medcial Association Advisory Committee on Title XVIII and the Board of Trustees of the Kentucky Hospital Association. The guidelines in greater detail were also furnished to each hospital and extended care facility. There is great concern among physicians, hospitals, extended care facilities, and the intermediary that some public misunderstanding exists pertaining to coverage for custodial care. The intermediary in Kentucky has requested of the Bureau of Health Insurance that easy to read, informative leaflets be made available to the hospital and extended care facility to assist the patient and his family in understanding this exclusion of coverage in the Medicare Program.

Appeals and Hearings

Beneficiaries and persons representing the beneficiary may be referred to the Social Security Administration when misunderstanding develops. Federal Regulations provide the beneficiary the right to appeal any determination as to the amount of benefits payable on his behalf under part A of Medicare. He may request a reconsideration of the determination of a claim in question. Should the individual's dissatisfaction continue following the reconsideration he may request a hearing if the amount

(Continued on page 298)

**This is a condensation from the CUSTODIAL CARE GUIDELINES. More detailed information may be obtained from Duane Harper, director of the Medicare Division of Kentucky Blue Cross.*

EDITORIALS

Rebirth

SPRING will soon be here. With the occurrence of this invigorating season, it is perennially customary to think, peruse, and contemplate.

Spring seems to be and has been the favorite calendar occasion of both poets and philosophers. Recall how our imaginations have been teased by allusions of new times, new birth, renewal, recleansing of mind and body, and fresh stimulus? Let's not forget what young (and perhaps old and in between) minds turn to thoughts of, primarily at this seasonal interlude.

It is most appropriate then that we of medicine should at this veronal time here in Kentucky, turn our beliefs in new times, new birth renewal, fresh stimulus and yes, those other thoughts, by annually having Senior Day for the students of our two medical schools.

How difficult in the turmoil—tumult—tension—turbulence—transplant—to keep from clinging to known ways, predictables and charted courses. "First of all, do no harm." Such being our natural route, we are fortunate to have new birth—new stimulus—new leadership being continually entering our ranks by the scientific and artful graduates, such as our two medical centers continually advance to us.

But we bear solemn responsibility in welcoming youth to our ranks. Remember, it's a new life and they, truly neophytes. From cloistered halls, they suddenly become private, independent agents. Today, 80 percent of teaching is done by well intentioned scientists who never had the opportunity for a private office or patients' demands. Organizationally, 75 percent of licensed physicians participate to some degree in organized medicine, while only 11 percent of our teachers similarly belong.

To give added impetus, we in Kentucky with the help and enthusiastic endorsement from our two schools, have now for 11 years tried to "bridge the gap" that makes all physicians a part of the whole, by giving Senior Day. At this time, we hope to expose our hopes for the future by "a view inside the tent."

This year the dates are, University of Louisville Senior Day, Monday, March 18, 1968 and the University of Kentucky Senior Day. Tuesday, April 9, 1968.

Every physician is invited to either or both functions. Come and contribute.

Now is the time for all to emulate spring by helping start new times, new birth, recleansing, fresh stimuli and yes, when you think of it, indeed to express thoughts of love to these, our own.

HOYT D. GARDNER, M.D.

Tetanus Prophylaxis*

AT A recent meeting of the KMA Committee on Occupational Health, Physical Medicine and Rehabilitation a wide ranging discussion of tetanus prophylaxis and treatment was held. The discussion at first centered on industrial accident cases but since the scope of this committee is not limited to industrial medicine, the state wide approach of physicians to tetanus prophylaxis and treatment was examined. The conclusion reached was that the KMA should again take the leadership in educating the physicians of Kentucky in the recent changes and advances in tetanus prophylaxis and treatment.

Despite recent advances in the treatment of established tetanus with mechanical ventilation, paralysing drugs and human tetanus immune globulin, this disease is all too frequently fatal and if the effects of the toxin are to be overcome, prolonged hospitalization, long hours of specialized nursing care and physician care with expensive equipment are often needed. The expense and burden on the hospital, the nursing staff, the physicians and the rehabilitation therapists, not to mention the expense to the patient and the worry of his family, himself, and his physician, are almost incalculable. Yet, this can all be prevented in the great majority of cases if proper immunization, wound care and tetanus prophylaxis are instituted.

In order to promote and distribute the most recent information regarding tetanus prophylaxis, the KMA Journal is printing a tear out chart titled "Prophylaxis Against Tetanus in Wound Management". This chart is reprinted with permission from the Sept.-Oct. 1967 Bulletin of American College of Surgeons and was prepared by Wesley Furste, M.D., Paul A. Skudder, M.D., and Oscar P. Hampton, Jr., M.D., all Fellows of the American College of Surgeons.

Points to be emphasized in the prophylaxis of tetanus are:

1) Basic wound care must not be neglected. All wounds should be thoroughly cleansed and debrided and foreign bodies should be removed.

2) Human Tetanus Immune Globulin has replaced Equine Tetanus Antitoxin. Equine antitoxin is to be used only if Human Tetanus Immune Globulin is not available within 24 hours and the possibility of tetanus outweighs the danger of reaction to "Horse Serum".

3) Adequate immunization with fluid or precipitated Toxoid is of prime importance in preventing the occurrence of tetanus and should be given to every patient, unless he has received a booster or has completed his initial immunization within the past 12 months.

4) In a patient not previously immunized for all wounds except clean minor wounds, *both* tetanus toxoid and human tetanus immune globulin should be given. Use different extremities for the injection of each agent. Follow-up immunization injections should be given to complete the individual's immunization.

By following these precepts in the prevention of tetanus, this disease can largely be eradicated. It should be every physician's duty to immunize his patients, his family and himself.

ROBERT E. ROBBINS, M.D.

**Fold out opposite page for chart "Prophylaxis Against Tetanus in Wound Management"*

Prophylaxis Against Tetanus in Wound Management

COMMITTEE ON TRAUMA, AMERICAN COLLEGE OF SURGEONS

General Principles



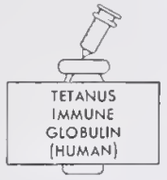
I. *Attending physician must determine for each patient what prophylaxis for tetanus is required.*

II. Regardless of active immunization status of patient, *meticulous surgical care, including removal of all devitalized tissue and foreign bodies, is to be provided immediately to all wounds.* Such care is essential.

III. *Every patient should receive tetanus toxoid intramuscularly* at the time of injury, as an initial immunizing dose, or as a booster for one previously immunized, unless he has received a booster or has completed his initial immunization within the past 12 months. As the antigen concentration varies in different products, specific information on the volume of a single dose is provided on the label.



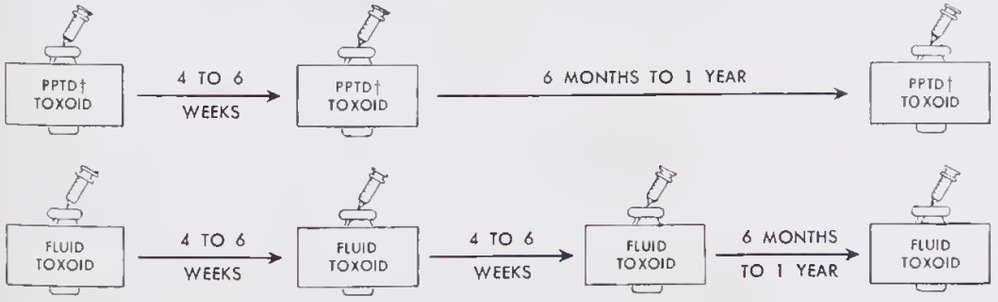
IV. *Whether to give human tetanus immune globulin or equine tetanus antitoxin for passive immunization must be decided for each patient.* Wound, conditions under which it was incurred, and previous active immunization status must be considered.



V. *To every wounded patient give a written record of immunizations,* instructing him to carry record and, if necessary, to complete active immunization.



VI. Basic immunization with precipitated (PPTD) toxoid requires three injections; and with fluid toxoid four injections.



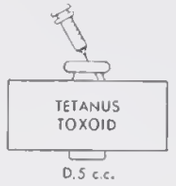
†*Precipitated*

This recommendation from the Committee on Trauma is the work of Subcommittee on Prophylaxis Against Tetanus—Wesley Furste, Columbus, Ohio; Paul A. Skudder, New York; and Oscar P. Hampton, Jr., St. Louis. It contains a number of changes made since it was published for the first time in 1965. Posters and reprints may be obtained from the Committee on Trauma, 55 East Erie Street, Chicago, Illinois 60611.

Specific Measures

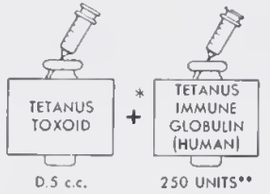
Previously Immunized Individuals

A. When the *patient has been immunized within the past six years,* give 0.5 c.c. tetanus toxoid booster.



B. When the *patient has been immunized more than six years,*

1. To the great majority only give 0.5 c.c. of tetanus toxoid.
2. To those with wounds which indicate an overwhelming possibility that tetanus will develop,
   a) Give* 0.5 c.c. of tetanus toxoid,
   b) Give* 250 units of human tetanus immune globulin,**
   c) Consider use of oxytetracycline or penicillin.



Individuals NOT Previously Immunized

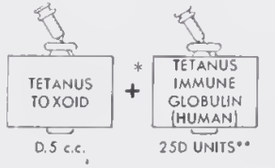
A. For *clean minor wounds* in which tetanus is unlikely, give 0.5 c.c. of tetanus toxoid (initial immunizing dose).

B. For *all other wounds*

1. Give* 0.5 c.c. of tetanus toxoid (initial immunizing dose),
2. Give* 250 units of human tetanus immune globulin,**
3. Consider use of oxytetracycline or penicillin.



C. *Equine antitoxin* is to be used only if human tetanus immune globulin is not available within 24 hours and only if the possibility of tetanus outweighs the danger of reaction to equine tetanus antitoxin. First, question patient and test for sensitivity.

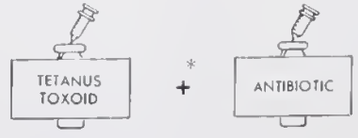


**Use different syringes, needles, and sites of injection.*
***In severe, neglected or old wounds, 500 units of human tetanus immune globulin are advisable.*

If patient is not sensitive to equine tetanus antitoxin, give at least 3,000 units.



If patient is sensitive to equine tetanus antitoxin by history or test, give penicillin or oxytetracycline, not antitoxin. Danger of anaphylaxis probably outweighs danger of tetanus. Do not attempt desensitization.



Inside chart reprinted from September-October, 1967 "Bulletin of the American College of Surgeons" by permission of the editor



"The inconvenience of a cold"

r a cold, NTZ® Nasal Spray provides rapid relief of ısal symptoms. Relief starts with the first spray which ens the inferior part of the common meatus. A second ray, a few minutes later, will shrink the turbinates to lp provide sinus drainage and ventilation. Dosage ay be repeated every three or four hours as needed, r temporary relief of symptoms. NTZ is well tolerated it overdosage should be avoided.

a sinusitis deterrent, NTZ Nasal Spray can be used to ep the nasal passages open during a cold to help pre- nt development of acute sinusitis—or to help prevent e acute condition from becoming chronic.

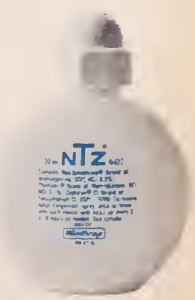
pplied: NTZ Nasal Spray, plastic squeeze bottles of ml.; NTZ Nasal Solution, bottles of 30 ml. (1 fl. oz.) th dropper.

NTZ is more than a simple vasoconstrictor. It contains

Neo-Synephrine® (brand of phenylephrine) HCl 0.5 per cent, the major component, virtually synonymous with fast, efficient but gentle nasal vasoconstriction.

Thenfadil® (brand of thenyldiamine) HCl 0.1 per cent, topical antihistamine for reduction of rhinorrhea, sneezing or itching. It combats the allergic reactions that may occur in colds or sinusitis.

Zephiran® (brand of benzalkonium, as chloride, refined) 1:5000, antiseptic preservative and wetting agent to promote penetration and spread of the formula.

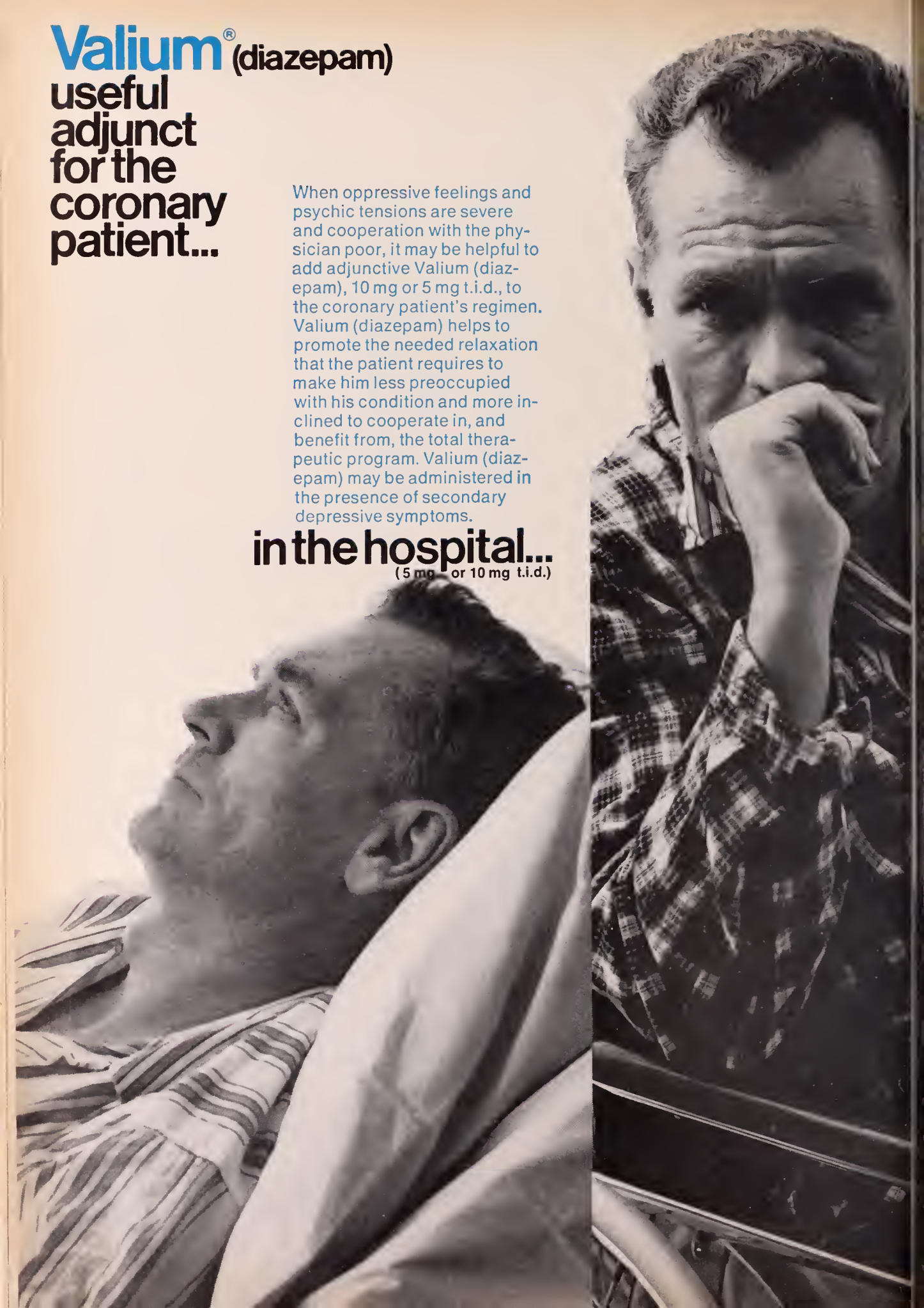


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Valium® (diazepam)
useful adjunct for the coronary patient...

When oppressive feelings and psychic tensions are severe and cooperation with the physician poor, it may be helpful to add adjunctive Valium (diazepam), 10 mg or 5 mg t.i.d., to the coronary patient's regimen. Valium (diazepam) helps to promote the needed relaxation that the patient requires to make him less preoccupied with his condition and more inclined to cooperate in, and benefit from, the total therapeutic program. Valium (diazepam) may be administered in the presence of secondary depressive symptoms.

in the hospital...
(5 mg or 10 mg t.i.d.)

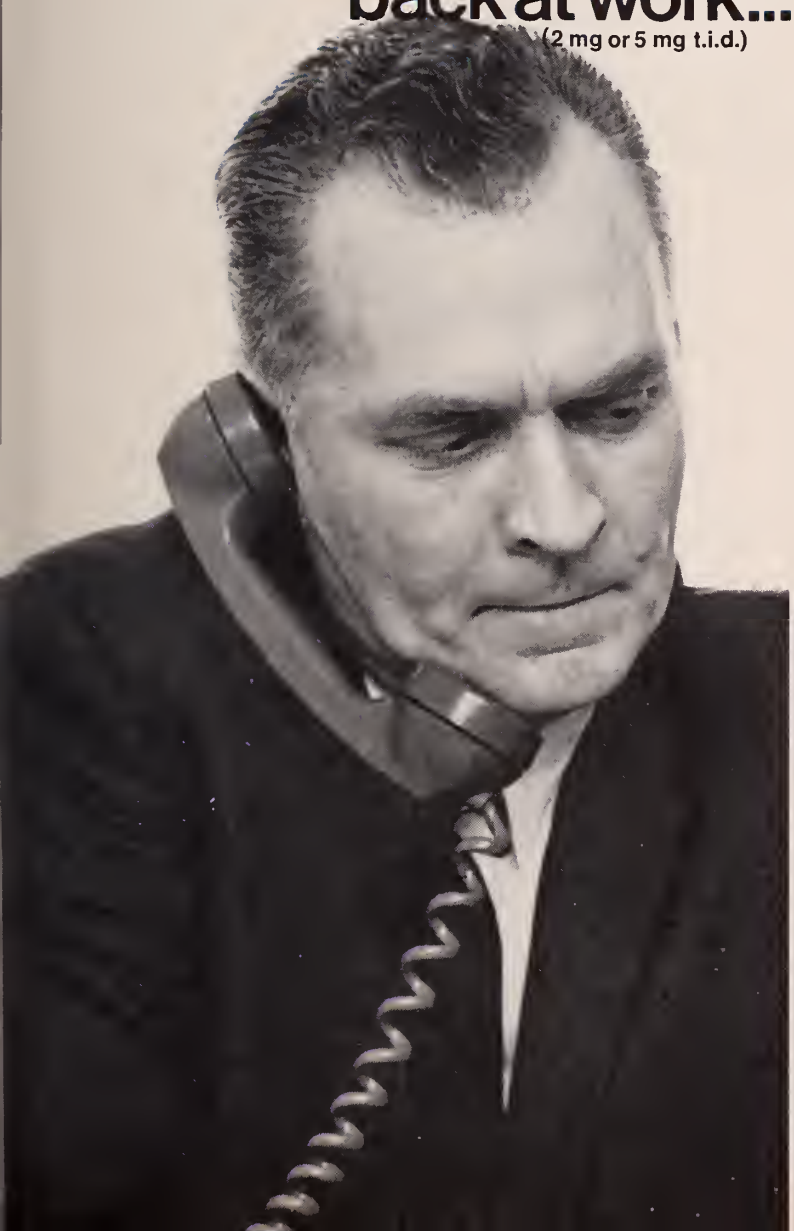


convalescing...
(2 mg or 5 mg t.i.d.)

The heart patient who leaves the hospital to enter a period of slow restorative treatment is often forced to make emotionally difficult adjustments. The resulting stress of this period may again cause psychic tension to mount to potentially harmful levels. To augment your reassurance and the emotional support of his family, a 2 mg or 5 mg t.i.d. regimen of Valium (diazepam) can reduce psychic tension and thereby help the patient to accept necessary restrictions more calmly, and to adjust to his illness more realistically.

Getting back to work presents additional stresses for the cardiac patient. There are often anxiety-producing features in the job which can be more significant than the physical or intellectual demands of the work. Valium (diazepam), 2 mg or 5 mg t.i.d., may be a useful adjunct to reduce overreaction to these stresses and thus help the patient to face job situations more calmly and rationally.

back at work...
(2 mg or 5 mg t.i.d.)



Valium® (diazepam)

to help relieve psychic tension

and for the patient with tension-induced sleeplessness, remember the value of an extra tablet at bedtime

Before prescribing, please consult complete product information, a summary of which follows:

Indications: Tension and anxiety states, moderate to severe psychoneurotic states with anxiety, apprehension or agitation alone or with depressive symptoms; somatic complaints which are concomitants of emotional factors; acute agitation due to alcohol withdrawal; muscle spasm associated with cerebral palsy and athetosis.

Contraindications: Infants, patients with history of convulsive disorders, glaucoma or known hypersensitivity to drug.

Warning: Not of value in the treatment of psychotic patients, and should not be employed in lieu of appropriate treatment.

Precautions: Limit dosage to smallest effective amount in elderly or debilitated patients (not more than 1 mg, one or two times daily initially) to preclude ataxia or oversedation, increasing gradually as needed or tolerated. As is true of all CNS-acting drugs, until correct maintenance dosage is established, advise patients against possibly hazardous procedures requiring complete mental alertness or physical coordination. Driving during therapy not recommended. In general, concurrent use with other psychotropic agents is not recommended. If such combination therapy is used, carefully consider individual pharmacologic effects—particularly with known compounds which may potentiate action of Valium (diazepam), such as phenothiazines, barbiturates, MAO inhibitors and other antidepressants. Advise patients against simultaneous ingestion of alcohol or other CNS depressants. Safe use in pregnancy not established. Employ usual precautions in treatment of anxiety states with evidence of impending depression; suicidal tendencies may be present and protective measures necessary. Observe usual precautions in impaired renal or hepatic function. Periodic blood counts and liver function tests advisable in long-term use. Cease therapy gradually.

Side Effects: Side effects (usually dose-related) are fatigue, drowsiness and ataxia. Also reported: mild nausea, dizziness, blurred vision, diplopia, headache, incontinence, slurred speech, tremor and skin rash; paradoxical reactions (excitement, depression, stimulation, sleep disturbances, acute hyperexcited states, hallucinations); changes in EEG patterns during and after drug treatment. Abrupt cessation after prolonged overdosage may produce withdrawal symptoms (convulsions, tremor, abdominal and muscle cramps, vomiting, sweating) similar to those seen with barbiturates, meprobamate and chlordiazepoxide HCl.

Dosage—Adults: Mild to moderate psychoneurotic reactions, 2 to 5 mg b.i.d. or t.i.d.; severe psychoneurotic reactions, 5 to 10 mg t.i.d. or q.i.d.; alcoholism, 10 mg t.i.d. or q.i.d. in first 24 hours, then 5 mg t.i.d. or q.i.d. as needed; muscle spasm with cerebral palsy or athetosis, 2 to 10 mg t.i.d. or q.i.d.

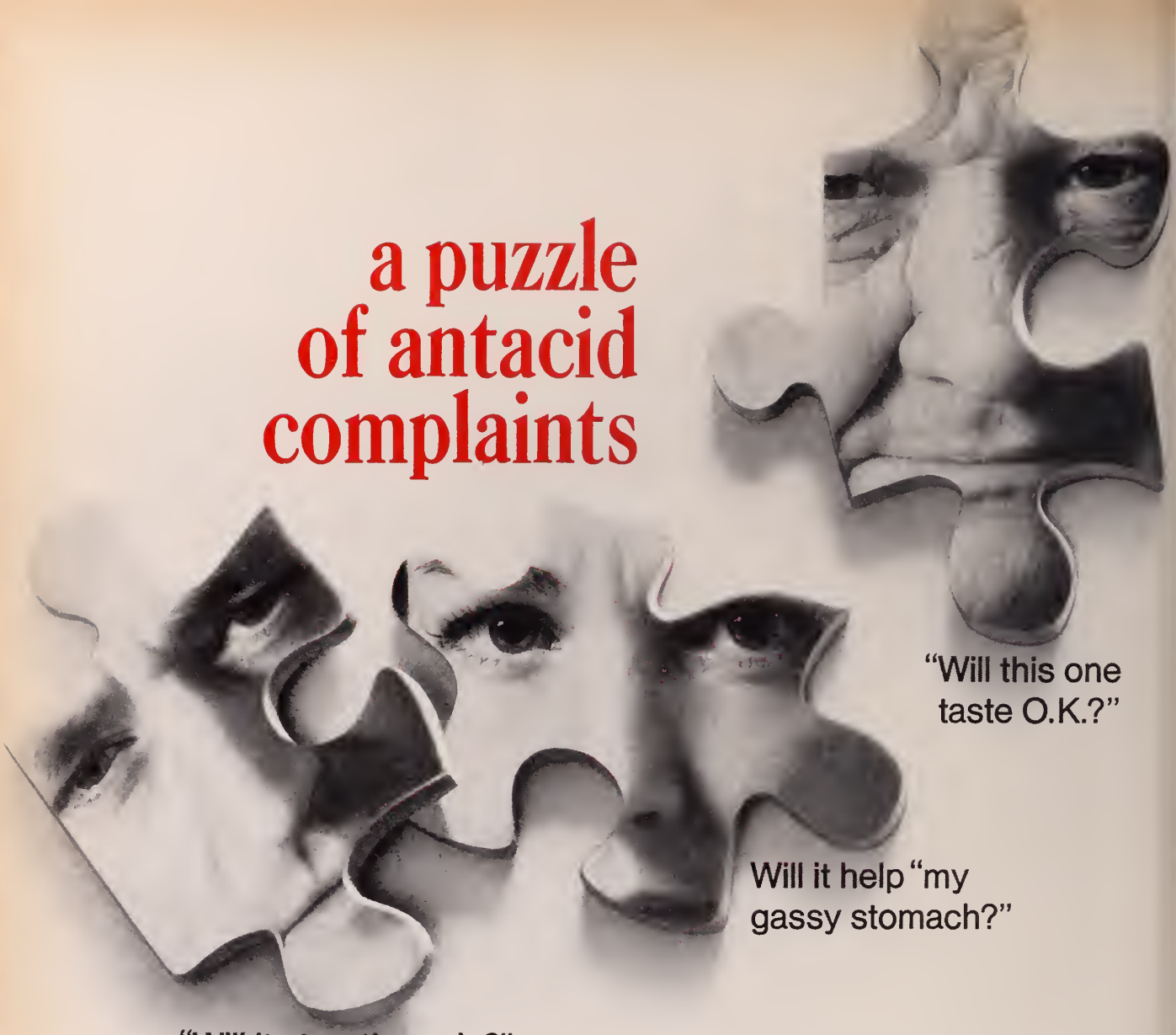
Geriatric patients: 1 or 2 mg/day initially, increase gradually as needed and tolerated. (See Precautions.)

Supplied: Valium® (diazepam) Tablets, 2 mg, 5 mg and 10 mg; bottles of 50 and 500.

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Nutley, New Jersey 07110

a puzzle of antacid complaints



Mylanta®

aluminum and magnesium hydroxide *plus* simethicone

a solution to peptic ulcer distress

Effective neutralization—
with the two most widely prescribed antacids: aluminum and magnesium hydroxides.

Concomitant relief of G.I. gas distress—
with the proven[1] defoaming action of simethicone.

Prolonged acceptance confirmed—
in 87.5% of 104 patients after a total of 20,459 documented days of therapy.[2]

Composition: Each Mylanta chewable tablet or teaspoonful (5 ml.) contains: magnesium hydroxide, 200 mg.; aluminum hydroxide, dried gel, 200 mg.; simethicone, 20 mg. Dosage: One or two tablets (well chewed or allowed to dissolve in the mouth) or one or two teaspoonfuls to be taken between meals and at bedtime.

References: 1. Hoon, J. R.: Arch. Surg. *93*:467 (Sept.) 1966.
2. Danhof, I. E., Personal communication.

Stuart Division/Pasadena, Calif.
ATLAS CHEMICAL INDUSTRIES, INC.

Don't let monilia cut broad-spectrum therapy short...

start with Tetrex-F®

tetracycline phosphate complex-nystatin

Use of broad-spectrum antibiotics can cause fungal overgrowth in the alimentary tract... and give rise to symptoms so troublesome that therapy must be prematurely stopped. Tetrex-F (tetracycline phosphate complex-nystatin) helps you circumvent this problem.

The nystatin can prevent overgrowth of monilia; the phosphate complex delivers tetracycline to the blood rapidly. Side effects are infrequent.

High-Risk Patients

Tetrex-F (tetracycline phosphate complex-nystatin) is especially useful in patients most susceptible to fungal overgrowth during tetracycline therapy: (1) the elderly or debilitated, (2) young children, (3) the diabetic, (4) those on long-term tetracycline therapy, (5) those on steroid therapy, (6) those who have had moniliasis before, and (7) pregnant patients with a history of monilial vaginitis.

When you start with economical Tetrex-F (tetracycline phosphate complex-nystatin), you can complete the full course of broad-spectrum therapy with less chance of losing control elsewhere. A good start for a healthy finish.

PRESCRIBING INFORMATION. For complete information consult Official Package Circular. *Indications:* Infections of respiratory, gastrointestinal and genitourinary tracts and skin and soft tissues due to tetracycline-sensitive organisms, in patients with increased susceptibility to monilial infections. *Contraindications:* The drug is contraindicated in patients hypersensitive to its components. *Warnings:* Photodynamic reactions have been produced by tetracyclines. Natural and artificial sunlight should be avoided during therapy. Stop treatment if skin discomfort occurs. With renal impairment, systemic accumulation and hepatotoxicity may occur. In this situation, lower doses should be used. Tooth staining and enamel hypoplasia may be induced during tooth development (last trimester of pregnancy, neonatal period and childhood). *Precautions:* Bacterial superinfections may occur. Infants may develop increased intracranial pressure with bulging fontanels. In gonorrheal therapy, serologic tests for syphilis should be conducted initially and monthly for 3 months. *Adverse Reactions:* Glossitis, stomatitis, nausea, diarrhea, flatulence, proctitis, vaginitis, dermatitis, and allergic reactions may occur. *Usual Adult Dosage:* 1 capsule q.i.d. Continue for 10 days in Beta-hemolytic streptococcal infections. Administer one hour before or two hours after meals. *Supplied:* Capsules, bottles of 16 and 100. Each capsule contains tetracycline phosphate complex equivalent to 250 mg. tetracycline HCl activity and 250,000 units of nystatin. For Oral Suspension, 125 mg. tetracycline and 125,000 u. nystatin/5 ml., 60 ml. bottles.

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ORGANIZATION SECTION

Topics of Vital Interest to Physicians Planned by Authorities

Scheduled To Speak at Interim Meeting April 17 and 18

"Title XIX in Kentucky" and "Usual and Customary Fees—or Who Says It's Reasonable?" are examples of the stimulating topics to be discussed by guest speakers on the program of the 1968 KMA Interim Meeting April 17 and 18 at the White House Inn, Covington.



Doctor Land



Doctor Wilbur

George F. Brockman, M.D., Greenville, KMA president, urges all Kentucky physicians to plan now to attend what promises to be a very outstanding meeting. In addition to the program of speakers, entitled "The Era of Partnership," there will be a meeting of the Board of Trustees, an Orientation Program for new members, and a meeting of the Woman's Auxiliary to KMA.

Francis L. Land, M.D., Washington, D.C., will discuss Title XIX, speaking with experience as Commissioner of the Medical Services Administration, Social and Rehabilitation Service, Department of HEW. Before joining the Department of HEW in 1966, Doctor Land had practiced in Ft. Wayne, Ind. for 15 years. He is a graduate of the Indiana University School of Medicine.

Usual and Customary Fees will be the topic of Richard S. Wilbur, M.D., San Francisco, Calif., chairman of the California Blue Shield Board. A 1946 graduate of Stanford Medical School, Doctor Wilbur has been a specialist in internal medicine at the Palo Alto Medical Clinic since 1952.

A panel discussion of the Ohio Valley Regional Medical Program will highlight the opening session of the meeting April 17. Participants will include Robert Q. Marston, M.D., Bethesda, Md., Louis Wozar, Dayton, Ohio, Walter I. Hume, Jr., M.D., Louisville, and James B. Holloway, Jr., M.D., Lexington, moderator.

Appearing on the April 18 program with Doctor Land and Doctor Wilbur will be Blair J. Henningsgaard, M.D., Astoria, Oregon, chairman of the AMPAC Board, whose topic will be "Two-Thirds of a Nation," and Philip R. Lee, M.D., Washington, D.C., secretary for Medical Affairs in the Department of HEW, who will speak at the luncheon session closing the meeting.

The complete program, released by Doctor Brockman at press time, appears on the opposite page.

IMPORTANT NOTICE

STATLER HILTON HAS NEW NAME

The name of the motel where the 1968 KMA Interim Meeting will be held April 17 and 18 has been changed from the **Lamplighter-Statler Hilton Motor Inn** to the **White House Inn,** it was announced at press time. The mailing address and telephone number remain the same.

The **White House Inn** is located at 1939 Dixie, Highway, Covington. The phone number is 606-331-1400.

When referring to the map on page 282, which indicates how to reach the site of the meeting, please note that the **White House Inn** is shown as the **Lamplighter.**

New Member Orientation Course To Be Offered April 17

The Sixth KMA Orientation Course for new members of the Association will be offered April 17 just prior to the opening of the 1968 Interim Meeting at the White House Inn, Covington.

New members are required to attend an orientation program within two years of joining the Association, in accordance with the KMA Bylaws.

Letters of invitation for this course, which is held twice each year in connection with the Interim and Annual Meetings, have been sent to new members. All physicians, whether new members or not, are invited to attend the session.



Doctor Lee

Program

"The Era of Partnership"

KMA 1968 Interim Meeting

April 17 and 18

White House Inn
(formerly the Lamplighter-Statler Hilton)
Covington



Doctor Henningsgaard

WEDNESDAY EVENING SESSION

George F. Brockman, M.D., Greenville, president
Kentucky Medical Association, presiding

5:00 p.m. Registration

6:30 p.m. Dinner —Ballroom

7:30 p.m. Call to order —Doctor Brockman

7:40 p.m. Panel Discussion—"The Ohio Valley Regional Medical Program"
James B. Holloway, Jr., M.D., Lexington, Ky., Moderator
Robert Q. Marston, M.D., Bethesda, Md.
Louis Wozar, Dayton, Ohio
Walter I. Hume, Jr., M.D., Louisville, Ky.

THURSDAY MORNING SESSION

Doctor Brockman, presiding
Berliner Room

8:45 a.m. Registration

9:15 a.m. Call to order and announcements

9:30 a.m. "Title XIX in Kentucky" —Francis L. Land, M.D., Washington, D.C.

10:00 a.m. "Two-thirds of a Nation" —Blair J. Henningsgaard, M.D., Astoria, Ore.

10:30 a.m. Coffee Break

10:45 a.m. "Usual and Customary Fees—or Who Says It's Reasonable?"—Richard S. Wilbur, M.D., San Francisco, Calif.

11:15 a.m. Question and Answer Session

12:15 p.m. Recess for Lunch

LUNCHEON SESSION

12:30 p.m.
Ballroom

Henry B. Asman, M.D., Louisville
KMA president-elect, presiding

Invocation —Rev. Clarence Lassiter, Clergy and Alcoholism Educator, Comprehensive Care Center, Covington

"Medicine in 1968"— Philip R. Lee., M.D., Washington, D.C.

Adjournment



Mr. Wozar



Doctor Marston

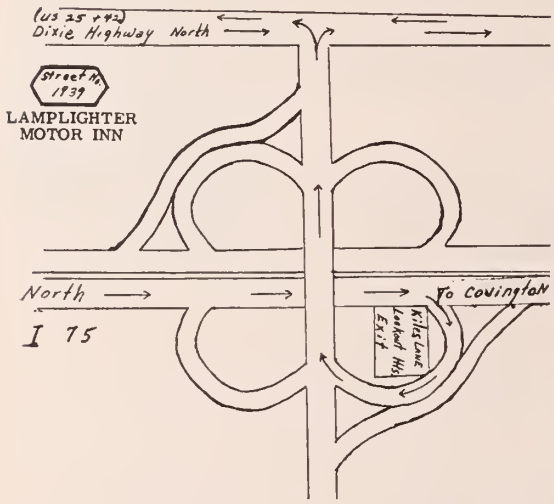


Doctor Holloway



Doctor Hume

HOW TO REACH THE WHITE HOUSE INN
(shown as the Lamplighter on the map)



AMA Plans 117th Annual Meeting June 16-20 in San Francisco

Four general scientific meetings, 50 medical motion pictures, a program of live color telecasting and more than 250 scientific exhibits are among the many activities planned during the 117th annual convention of the American Medical Association June 16-20 in San Francisco.

Topics of the scientific meetings will include automobile accidents, health care planning, management of infectious diseases, and treatment of advance malignant disease. It is expected that approximately 600 scientific papers will be presented during the five-day session.

The scientific program will be held in the San Francisco Civic Auditorium, War Memorial Opera House and nearby hotels. The House of Delegates will meet in the Fairmont Hotel.

AMA President Milford O. Rouse, M.D., urges all physicians to begin making plans now to attend this exciting and informative annual session.

MAKE YOUR RESERVATIONS NOW FOR THE INTERIM MEETING

You are urged by KMA President George F. Brackman, M.D., ta make room reservatians as saon as possible for the Interim Meeting, April 17 and 18 at the White Hause Inn (farmerly the Lamplighter -Statler Hilton)

Handy reservatian cards were mailed with your February issue af The Cammunicatar. Or, you may write directly to the Inn at 1939 Dixie Highway, Cavington, if you have misplaced your reservatian card. The telephone number at the White House Inn is 606-331-1400.

For directions to reach the Inn, see the map abave. The Inn is shawn as the Lamplighter an this map.

AMA Board Appoints Dr. Brockman To Newly Formed Committee

George F. Brockman, M.D., Greenville, KMA president, has been appointed by the Board of Trustees of the American Medical Association to serve on the newly established and highly important AMA Committee on Planning and Development.


Doctor Brockman

The AMA House of Delegates approved the establishment of the new group on a recommendation from the Board of Trustees. Doctor Brockman was notified of his appointment by F. J. L. Blasingame, M.D., AMA executive vice president.

The purposes of the new Committee are to:

(a) Study and make recommendations concerning the long range objectives of the Association and the resources, programs, and organizational structure by which the Association attempts to reach them;

(b) Serve as a focal point for the planning activities of the Association and stimulate and coordinate planning activities throughout the organization;

(c) Study, or cause to be studied, medicine and the environment in which the Association must function and transmit the conclusions of these studies in the form of recommendations to the Board of Trustees for distribution to appropriate decision-making centers throughout the Association, particularly the House of Delegates.

Pediatricians and Radiologists Plan Annual Spring Programs

David H. Baker, M.D., director of radiology at Babies Hospital, Columbia-Presbyterian Medical Center, New York, will be the guest of the Kentucky Chapters of the American Academy of Pediatrics and the American College of Radiology at their annual spring meetings in April.

The Academy of Pediatrics will meet April 24 and 25 at Park Mammoth Resort, Park City, according to Keith M. Coverdale, M.D., Bowling Green, program chairman. The College of Radiology's meeting will follow April 26 at the Imperial House, Lexington, according to Harold Q. Davis, M.D., Louisville, president of the Kentucky Chapter.

Doctor Baker's topic at both meetings will be "Surgical Emergencies in the Newborn that Mimic Medical Respiratory Disease." The Academy of Pediatrics will also have as guest speaker William Crook, M.D., Jackson, Tenn., author of the book "Answering Parents' Questions." Doctor Crook will discuss "Improvement of the Delivery of Services to Our Pediatric Patients."

Preceding his participation in the two Chapter meetings, Doctor Baker will lecture at the University of Kentucky Medical Center during the week of April 22.

Ky. Ob-Gyn Society To Have Annual Session April 26

Four guest speakers will participate in the program of the annual spring meeting of the Kentucky Obstetrical and Gynecological Society April 26 and 27 at Stouffer's Inn, Louisville, according to Walter M. Wolfe, M.D., secretary-treasurer of the Society. The session's theme will be "Early Lesions."



Doctor Jones

Howard W. Jones, Jr., M.D., associate professor of obstetrics and gynecology at Johns Hopkins School of Medicine, Baltimore, Md., will discuss "The Current Status of Diagnosis and Treatment of Ovarian Carcinoma" and "The Nature of Cancer as Illustrated in the Cervix, Corpus and Ovary." Doctor Jones graduated from the Johns Hopkins School of Medicine in 1935. He is a member of the American Association for Cancer Research.

Guest speakers who will discuss other aspects of early lesions are Richard Symmonds, M.D., Rochester, Minn.; Felix Rutledge, M.D., Houston, Texas; and Prof. John Stallworthy, Oxford University, England. Laman A. Gray, M.D., Louisville, and John W. Roddick, Jr., M.D., Lexington, will each moderate a panel discussion of questions from the audience.

Ky. Chapter ACS To Meet April 4

The annual meeting of the Kentucky Chapter of the American College of Surgeons will be April 4, 5 and 6 at the Imperial House, Lexington, according to David A. Hull, M.D., secretary-treasurer.

The program for the meeting has been planned by the department of surgery of the University of Kentucky College of Medicine, Doctor Hull said.

Reelected to AMPAC Board

Hoyt D. Gardner, M.D., Louisville, was reelected secretary and treasurer of the Board of Directors of the American Medical Political Action Committee (AMPAC) at its last meeting in Chicago.

Blair S. Henningsgaard, M.D., Astoria, Oregon, was reelected president of AMPAC at the same meeting. Under the AMPAC Bylaws, no one member of the Board can hold the same office more than two years.



One by one
the family's downed
Because the
G.I. bug's around

Parepectolin for quick relief of acute diarrhea
...soothes colicky pain with paregoric*
...consolidates fluid stools with pectin
...adsorbs irritants with kaolin,
and protects intestinal mucosa

Whether it's a 24-hour "bug", a food problem, or simply nervousness and anxiety, Parepectolin will bring the diarrhea under control until etiology can be determined. In some cases, Parepectolin may be all the therapy necessary.

Parepectolin®

Each fluid ounce of creamy white suspension contains:
*Paregoric (equivalent) ..... (1.0 dram) 3.7 ml.
Contains opium (¼ grain) 15 mg. per fluid ounce.
warning: may be habit forming
Pectin ..... (2½ grains) 162 mg.
Kaolin (specially purified) .... (85 grains) 5.5 Gm.
(alcohol 0.69%)
Usual Adult Dose: One or two tablespoonfuls three times daily.
Usual Children's Dose: One or two teaspoonfuls three times daily.

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Seven Ky. Physicians Appointed To AMA Councils, Committees

William T. Rumage, Jr., M.D., Louisville, was named chairman of the Committee on Disaster Medical Care to which he was reappointed by the Board of Trustees of the American Medical Association at its November, 1967 meeting.

In all, the AMA Board appointed or reappointed seven Kentucky physicians to various AMA councils and committees, according to a list supplied to KMA by Ernest B. Howard, M.D., AMA assistant executive vice president.

Each term of service on an AMA council or committee is for one year with a maximum tenure of 10 consecutive terms.

David B. Stevens, M.D., Lexington, was appointed to the Committee on Quackery to replace retired member Frederick R. Scroggin, M.D., Dry Ridge. Reappointments, in addition to Doctor Rumage, include Donn L. Smith, M.D., Louisville, Council on Drugs; William K. Keller, M.D., Louisville, Committee on Medical Aspects of Automotive Safety; and Nicholas J. Pisacano, M.D., Lexington, Committee on Rehabilitation.

Reappointments to the Interspecialty Committee include Robert W. Lykins, M.D., Louisville, representing the American Society of Anesthesiologists, and Carroll L. Witten, M.D., Louisville, alternate, representing the American Academy of General Practice.

Senior Day Programs To Feature Dr. Wilbur and Dr. Jarvis

Dwight L. Wilbur, M.D., AMA president-elect from San Francisco, California, and Charles W. Jarvis, D.D.S., a San Marcos, Texas dentist, will be the featured speakers on the two KMA Senior Day Programs for 1968, according to Hoyt D. Gardner, M.D., Louisville, chairman of the KMA Senior Day Committee.

Doctor Jarvis, known as America's Number One Humorist on the banquet and convention circuit, will speak to the University of Louisville senior medical students at the Executive Inn, Monday, March 18. The title of his address will be "One and One-Half Doctors."

Doctor Wilbur, who will be installed as President of the American Medical Association in June of this year, will address the University of Kentucky senior students on "The Physician and Society" at the Imperial House, Lexington, Tuesday, April 9.

Each Senior Day Program is a day-long session. KMA members present carefully planned topics to assist the medical students in bridging the gap between academic and the actual practice of medicine. This marks the fifth annual program for the University of Kentucky seniors and the fourteenth for those of the University of Louisville.

Doctor Gardner emphasized appreciation of his committee members and the official family of KMA for the cooperation of the two medical schools and the support of the Jefferson and Fayette County Medical Societies in making these programs possible.



Doctor Jarvis



Doctor Wilbur

Arthritis Foundation, UL To Hold Rheumatic Diseases Symposium

The fourth annual Post Graduate Symposium on Rheumatic Diseases has been planned for Thursday, April 25, in the Rankin Amphitheater of Louisville General Hospital, according to David H. Neustadt, M.D., Louisville, program chairman.

The one-day conference, jointly sponsored by the Kentucky Chapter of the Arthritis Foundation and the University of Louisville School of Medicine, will be devoted to the systemic disorders involving connective tissue, or the so-called "collagen" diseases. Special emphasis will be given to new information and recent research.

International authorities scheduled to appear on the program include Edmund L. Dubois, M.D., and Carl Pearson, M.D., Los Angeles, Calif., Gregorio Mintz, M.D., Mexico City, Gerald Rodnan, M.D., Pittsburgh, Pa., and Lawrence Shulman, M.D., Baltimore, Md. Additional information may be obtained from the Symposium Program Committee, Kentucky Arthritis Foundation, 209 Speed Bldg., Louisville.

Dr. Howard Reappointed by Gov.

C. C. Howard, M.D., Glasgow, was recently reappointed to a four-year term on the state Tuberculosis Hospital Commission by Gov. Louie B. Nunn. New appointments to the Commission include J. Sankey Williams, M.D., Nicholasville, Buford Davis, M.D., Louisville, and Delbert Agle, Lancaster.

The new appointees succeed Boyce E. Jones, M.D., London, Alec Spencer, M.D., West Liberty, and Howard B. Hunt, Louisville.

Ky. Surgeons Become AAOS Fellows

George E. Ainsworth, M.D., Madisonville, and Robert B. Miller, M.D., Paducah, were among 296 surgeons to be inducted as Fellows of the American Academy of Orthopedic Surgeons during the group's 35th annual meeting in Chicago recently, according to press reports.

POST-GRADUATE SYMPOSIUM ON RHEUMATIC DISEASES

Rankin Amphitheater **APRIL 25, 1968** Louisville General Hospital

SPONSORED BY THE UNIVERSITY OF LOUISVILLE SCHOOL OF MEDICINE AND THE KENTUCKY ARTHRITIS FOUNDATION

TOPIC: THE "COLLAGEN" DISEASES

The aim of this symposium is to present a comprehensive and informative review of the systemic connective tissue or so-called "collagen" diseases, including systemic lupus erythematosus, diffuse scleroderma, dermatomyositis, and related disorders. Emphasis will be given to current knowledge with attention to clinical features, biochemical alterations and recent progress and research. Modern trends in the management of these difficult to handle disorders will be critically discussed. Panel discussions featuring audience participation will conclude the morning and afternoon sessions.

GUEST FACULTY:

EDMUND L. DUBOIS, M.D.: Associate Clinical Professor of Medicine, University of Southern California School of Medicine; Director of the "Collagen Disease" Clinic, The Los Angeles County General Hospital.

GREGORIO MINTZ, M.D.: President, Mexican Society of Rheumatology; Director Rheumatic Diseases, Centro Medico Nacional Hospital General, Mexico City. Associate Professor of Medicine, Graduate Division, University of Mexico.

CARL M. PEARSON, M.D.: Professor of Medicine, School of Medicine, University of California, Los Angeles.

GERALD P. RODNAN, M.D.: Professor of Medicine and Chief of Section on Rheumatic Diseases, University of Pittsburgh School of Medicine, Pittsburgh, Pa.

LAWRENCE E. SHULMAN, M.D., Ph.D.: Professor of Medicine, and Director, Connective Tissue Division, The Johns Hopkins University, School of Medicine; Physician-in-Charge, Arthritis Clinic, the Johns Hopkins Hospital, Baltimore.

U. OF L. FACULTY:

Frank W. Lehn, M.D. David H. Neustadt, M.D. Donn L. Smith, M.D. Beverly T. Towery, M.D.

NO REGISTRATION FEE **LUNCHEON FEE $3.50**

Approved for six prescribed hours by American Academy of General Practice

FOR FURTHER INFORMATION CONTACT KENTUCKY ARTHRITIS FOUNDATION, 209 SPEED BUILDING, LOUISVILLE, KY. 40202

How Much Do You Know About the Fair Labor Standards Act?*

A Louisville physician partnership has been charged with violation of the federal minimum wage law, jurisdiction being claimed because approximately 10 percent of its patients are from Indiana and are billed by mail.

The law exempts employees of a "service establishment" (with certain exceptions) if the service is recognized as retail "in the particular industry" and more than 50 percent of its annual dollar volume of services is derived from the home state *unless* it has an annual dollar volume of more than $250,000! If volume exceeds $250,000, there is no exemption. (Title 29, Sec. 203, 213, U.S. Code Anno.)

Of course, if the establishment and the particular employee are not engaged in interstate commerce, the law does not apply, but courts have liberally construed the law to cover employees engaged directly in the interstate aspects of their employer's business ever though they spend only a small portion of their total day on such work.

Staff will watch this disturbing development and let you know, through the *Journal* or *Communicator*, if a decision adverse to the partnership is rendered.

**This article was prepared by the Association's general counsel, Mr. E. Gaines Davis, at the request of the editors.*

Dr. Spurling, Neurosurgeon, Dies in California at 73

R. Glen Spurling, M.D., 73, formerly of Louisville, recognized as one of the country's leading neurosurgeons, died February 7 in La Jolla, Calif., where he retired three years ago.

A 1923 graduate of the Harvard University Medical School, Doctor Spurling, Kentucky's first neurological specialist, studied under Harvey Cushing, M.D., known as this country's father of neurosurgery.

While practicing in Louisville, Doctor Spurling had offices in the Heyburn Building. He was a member of numerous medical associations including the Southern Surgical Society, American Academy of Neurological Surgery, American Neurological Association and the Harvey Cushing Society.

Second Medical Education Conf. Termed Highly Successful

KMA President George F. Brockman, M.D., Greenville, and the deans of Kentucky's two medical schools, Donn Smith, M.D., University of Louisville, and William S. Jordan, M.D., University of Kentucky, led a delegation of nearly 60 physicians to Park Mammoth Resort for the Second Conference on Medical Education, January 26 and 27.

The first conference was held at Park Mammoth in January of 1966. Andrew M. Moore, M.D., Lexington, conference chairman, termed both meetings highly successful and indicated that similar meetings would be held in the future.

Physicians attending the conference included both KMA representatives and full-time faculty members of the two universities. The conference was jointly sponsored by KMA, the University of Louisville School of Medicine and the University of Kentucky College of Medicine.

Topics discussed by a number of speakers included "The Mechanics and Philosophy of Basic Sciences Curriculum in Teaching and Research" and "The Impact of Socio-Economic Changes on Medicine." Walter I. Hume, Jr., M.D., Louisville, was chairman of a group discussion session on the Saturday morning program.

Heart Association Grants Awarded

The University of Louisville School of Medicine and the University of Kentucky College of Medicine have received grants for heart research totaling $87,781 from the Kentucky Heart Association and the Heart Association of Louisville and Jefferson County, according to a recent press report.

U of L physicians sharing in the grants are Sheppard M. Walker, M.D., and Carlos F. Gonzalez, M.D. Physicians at U of K receiving shares include Linda R. Walters, M.D., Ernest P. McCutcheon, M.D., Leonard S. Gettes, M.D., Joseph R. Logic, M.D., Joseph R. Dorchak, M.D., and Ralph Shabetai, M.D.

To fight TB- find it first!

Make tuberculin testing routine with every physical examination.

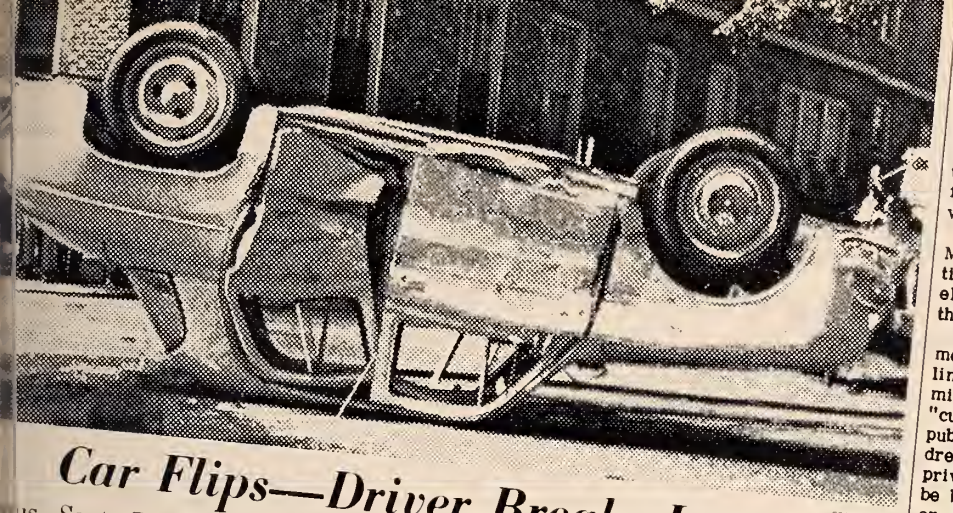


TUBERCULIN,TINE TEST (Rosenthal)

Side effects are possible but rare: vesiculation, ulceration, or necrosis at test site. Contraindications: none, but use with caution in active tuberculosis. Available in 5's and 25's.

Lederle

390—8/6135



Car Flips—Driver Breaks Leg

STAFF PHOTO

...us, Sept. 7. John P. Jones of ... incurred a broken leg today ... driving ... Patrolman B. R. Brown, the car hit a fire hydrant and flipped over on its ... Hasn't he ... ...itar

statemer... issue, a... tember t... fications'... ton dicta... Althou... made Mo... down by a... ter shar... flat obje... was pass... Board... McCred... tion" s... elimir... the st.... The c... ment ca... limit ra... mile li... "cut-of... public... dren... priv... be b... or th... schoo... The... so so... rather... burs...

He's had enough excitement for one day.

For the patient who has been through an accident, the worry and anxiety following the experience may actually heighten the perception of pain. This is why there's a classic ¼ grain *sedative* dose of phenobarbital in Phenaphen with Codeine—*to take the nervous "edge" off,* so the rest of the formula can control the pain more effectively.

Phenaphen® with Codeine

Phenaphen® with Codeine No. 2, No. 3, or No. 4 contains: *Phenobarbital* (¼ gr.), 16.2 mg. (Warning: may be habit forming); Aspirin (2½ gr.), 162.0 mg.; Phenacetin (3 gr.), 194.0 mg.; Hyoscyamine sulfate, 0.031 mg.; Codeine Phosphate, ¼ gr. (No. 2), ½ gr. (No. 3), or 1 gr. (No. 4). (Warning: may be habit forming).

THE COMPOUND ANALGESIC THAT CALMS INSTEAD OF CAFFEINATES

Indications: Phenaphen with Codeine provides relief in severer grades of pain, on low codeine dosage, with minimal possibility of side effects. Its use frequently makes unnecessary the use of addicting narcotics. **Contraindications:** Hypersensitivity to any of the components. **Precautions:** As with all phenacetin-containing products excessive or prolonged use should be avoided. **Side effects:** Side effects are uncommon, although nausea, constipation and drowsiness may occur. **Dosage:** 1 or 2 capsules at 2 to 4 hour intervals, or as directed by physician. For further details see product literature.

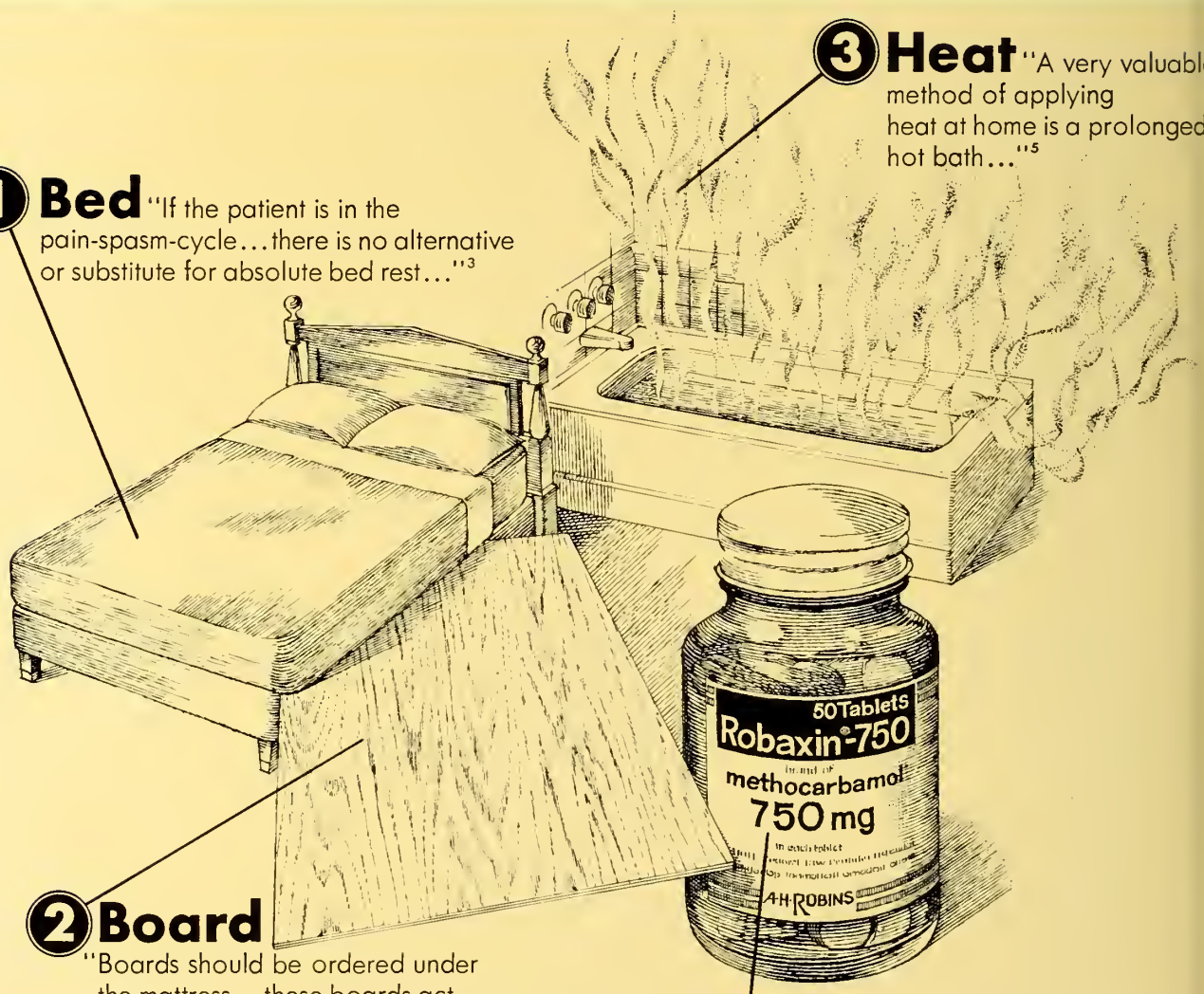
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LOW-BACK PAIN

A CONSERVATIVE, FOUR-POINT PROGRAM

The low back pain that is most frequently seen in general practice is mechanical in nature, i.e., postural back pain, joint dysfunction and acute back strain.[1,2] For this type of discomfort, a conservative regimen is usually sufficient to relieve aches and pains, and to help keep the patient functioning. Components of this basic program include:



1 Bed "If the patient is in the pain-spasm-cycle...there is no alternative or substitute for absolute bed rest..."[3]

2 Board "Boards should be ordered under the mattress...these boards act by immobilizing the spine..."[4]

3 Heat "A very valuable method of applying heat at home is a prolonged hot bath..."[5]

4 Robaxin®-750 (methocarbamol, 750 mg. capsule-shaped tablets) A well-tolerated[6] skeletal muscle relaxant, methocarbamol helps relieve spasm "...without interfering with normal tone and movement."[7] And there is little likelihood of sedation.[6]

Indicated for relief of skeletal muscle spasm. **Contraindicated** in hypersensitive patients. **Side Effects** (lightheadedness, dizziness, drowsiness, nauseo) may occur rarely, but usually disoppear on reduced dosage. Hypersensitivity reoctions develop infrequently. See product literature for further details. **Also available:** Robaxin® Tablets (methocarbamol, 500 mg.) Robaxin Injectable (methocorbomol, 1 Gm./10 cc.)

References: (1). Godfrey, C.M.: Applied Therop. 8:950, 1966. (2). Gottschalk, L.A.: GP 33:91, 1966. (3). Rowe, M.L.: J. Occup. Med. 2:219, 1960. (4). Cozen, L.: South Dokota J. Med. 18:26, 1965. (5). Soto-Holl, R.: Med. Sc. 14:23, 1963. (6). Weiss, M. and Weiss, S.: J. Am. Osteopath. A. 62:142, 1962. (7). Feuer, S.G., *et al.*: New York J. Med. 62:1985, 1962.

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Seventh and Tenth Trustee Dists. Hold Annual Sessions in Feb.

KMA President George F. Brockman, M.D., Greenville, discussed trustee redistricting and other controversial topics as guest speaker for the meetings of the Seventh and Tenth KMA Trustee Districts in February.

Fred C. Rainey, M.D., Elizabethtown, chairman of the Committee on Legislative Activities for State Affairs, shared the February 13 program of the Tenth District with Doctor Brockman in Lexington. Hoyt D. Gardner, M.D., Louisville, The committee's chairman for National Affairs, appeared on the program with Doctor Brockman at the meeting of the Seventh District February 14 in Shelbyville.

Both chairman, who have been attending sessions of the 1968 General Assembly in Frankfort, reported on the current action being taken there.

KMA Executive Committee Approves AMA Report P

Paul Parks, M.D., Bowling Green, chairman of the KMA Coordinating Commission of Governmental Medical Services, told the KMA Executive Committee at its January 26 meeting that his committee strongly urged the approval of the AMA House of Delegates' action on "Report P".

Doctor Parks pointed out that "Report P" was made by the AMA Board of Trustees to the House of Delegates and passed by the House at its Houston meeting in December. It relates to the growth of regional medical programs throughout the country.

It was indicated that some activities are said to be only remotely related to educational programs concerning heart disease, cancer and stroke.

The Executive Committee gave lengthy consideration to the recommendation of the committee chaired by Doctor Parks and unanimously approved the following report. In order that the membership might understand, *The Journal* was directed to carry the report *in toto*.

The American Medical Association recognizes the advantages that accrue to the public and to the medical profession from the timely dissemination of advances made in the health care field.

The Heart Disease, Cancer, and Stroke Amendments of 1965 (PL 89-239), as finally passed by the Congress and signed into law, emphasize continuing education of physicians and authorize patient care only insofar as it contributes to this aspect.

The trend in some areas to exceed this authority is unfortunate and should be discouraged. Many activities are developing which are at best only remotely related to educational programs concerning heart disease, cancer, and stroke.

Attempts to impose standards on a national scale in such a personal matter as patient care are to be condemned. The intangible, but necessary ingredient of professional judgment does not lend itself to standardization; yet any efforts to evaluate an individual's service must take it into account.

The Board of Trustees is directed to take appropriate action to attempt effectively to arrest these trends and to keep state and local medical societies informed of significant developments.

Health Examination Survey Set For 3 Ky. Counties in April

The Health Examination Survey of the U.S. Public Health Service will visit Bell, Knox and Whitley Counties during a three-week period beginning April 25 to examine a sample of the teen-aged population as part of a nationwide health survey of about 8,000 adolescents. A similar survey was conducted in these three counties in 1964 when younger children were examined.

The Survey is a program which collects data, primarily on the health aspects of growth and development, by means of direct health examinations of representative samples of the population, according to Peter V. V. Hamill, M.D., chief medical advisor of the PHS Division of Health Examination Statistics.

Included in the health survey team will be physicians, a nurse, a dentist, two psychologists and PHS staff technicians. No referrals for diagnosis will be made, but a report of relevant findings will be sent to any youth's physician or dentist upon the request of his parents.

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supplied in ¾, 1½, and 3-grain Pulvule



Tuinal helps wakeful patients fall asleep fast, stay asleep all night.

Indications: Tuinal is indicated for prompt and moderately long-acting hypnosis. It is not suitable for continuous daytime sedation.

Contraindications: Barbiturates should not be administered to anyone with a history of porphyria, nor should they be given in the presence of uncontrolled pain, because excitement may result.

Warning: May be habit-forming.

Precautions: Tuinal should be used cautiously in patients with decreased liver function, since prolongation of effect may occur.

Adverse Reactions: Idiosyncrasy, such as excitement, hangover, or pain, may appear. Hypersensitivity reactions occur in some patients, especially in those with asthma, urticaria, or angioneurotic edema.

Overdosage: C.N.S. depression. Symptoms—Depression of respiration and of superficial and deep reflexes, slight constriction of the pupils (in severe poisoning, dilation), decreased urine formation, lowered body temperature, coma. Treatment—Symptomatic and supportive (gastric lavage; intravenous fluids; maintenance of blood pressure, body temperature, and adequate respiration). Dialysis may speed removal of barbiturates from body fluids.



Dosage: 50-200 mg. (¾-3 grains) at bedtime.

[031767]

Additional information available to physicians upon request.
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Dr. Rainey Discusses Legislation At Jefferson Co. Society Mtg.

Approximately 150 physicians attended the February 19 meeting of the Jefferson County Medical Society in Louisville at which Fred C. Rainey, M.D., Elizabethtown, chairman of the KMA Committee on Legislative Activities for State Affairs, discussed current action in the 1968 General Assembly.

Doctor Rainey, who was introduced by KMA President George F. Brockman, M.D., Greenville, had been scheduled to speak at the annual meeting of the Fifth KMA Trustee District in Louisville January 15.

Due to inclement weather, the Trustee District meeting was cancelled. Doctor Brockman expressed appreciation to the Jefferson County Medical Society for inviting Doctor Rainey to speak at the meeting.

Radiologists Elect Dr. Mahaffey

Charles K. Mahaffey, M.D., Danville, was named president-elect of the Kentucky Chapter of the American College of Radiology in a recently held mail ballot, according to Ralph C. Quillin, M.D., Lexington, who was re-elected secretary-treasurer of the chapter. Robert D. Shepard, M.D., Lexington, was named alternate councilor in the same election.

Harold Q. Davis, M.D., Louisville, is currently serving as president of the Chapter. Frank Bechtel, M.D., Louisville, is the Chapter's councilor.

Dr. Maxwell Receives ACR Degree

Edward N. Maxwell, M.D., Louisville, was one of 89 radiologists to receive the fellowship degree of the American College of Radiology February 9 in Chicago.

The degrees were awarded for outstanding contributions to medicine, according to a recent release from the College. The ACR is a national association of physicians and physicists specializing in use of x-rays in the diagnosis and treatment of disease.

After Hours Medical Center Grows

The After Hours Medical Center, a unique medical program started 16 months ago by the six Henderson physicians who continue to operate it, is now handling an average of 25 patients a night, according to a recent newspaper report.

One physician is on duty at the center from 7 p.m. to 6 a.m. through the week and from 10 a.m. to 6 a.m. Sundays and holidays. Availability is the center's biggest service, according to John Logan, M.D., center chairman, who feels that this type of medical office will become more widely used in the future.

In Memoriam

JOSEPH H. KURRE, SR., M.D.
Owensboro
1918-1968

Joseph H. Kurre, Sr., M.D., 50, an obstetrician, died January 28 at his home in Owensboro. Death was attributed to a heart attack. Doctor Kurre graduated from the University of Louisville School of Medicine in 1942 and had practiced in Owensboro since 1947.

KMA Committee Reports

Committee On Cults

David B. Stevens, M.D., Lexington, Chairman

American Legion Hall, Frankfort **January 4, 1968**

The Committee on Cults had its initial meeting of the 1967-68 Associational Year on January 4. For the benefit of the new members, David B. Stevens, M.D. chairman, reviewed the history of the Cult Committee and outlined its future activities and plans.

Committee On Legislative Activities

Hoyt D. Gardner, M.D., Louisville, Chairman for National Affairs

Fred C. Rainey, M.D., Elizabethtown, Chairman for State Affairs

American Legion Hall, Frankfort **January 4, 1968**

The Committee on Legislative Activities met on January 4 for the primary purpose of discussing legislation expected to be presented at the 1968 Kentucky General Assembly.

Technical Advisory Committee On Indigent Medical Care

(Title XIX of the Social Security Act)

Carroll H. Robie, Jr., M.D., Louisville, Chairman

KMA Headquarters Office **January 18, 1968**

The Technical Advisory Committee on Indigent Medical Care met on January 18, 1968. The major topic of discussion was the changes in the 1967 Medicaid Law.

Guests at this meeting included staff members of the Medical Assistance Program in Kentucky, Mr. Evan Ray, Director; Mr. Jim Rogers, Senior Administrative Assistant; and Mr. Donald C. Dixon, Administrative Officer.

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New County Society Officers For 1968 Reported to KMA

The following list of officers and delegates of county medical societies for 1968 had been received by the KMA membership department as of February 20:

Clinton
President: Earnest A. Barnes, M.D., Albany
Secretary: Floyd B. Hay, M.D., Albany
Delegate to KMA: Earnest A. Barnes, M.D.
Alternate: Floyd B. Hay, M.D.

Cumberland
President: W. F. Owsley, M.D., Burkesville
Secretary: Joseph Schickel, M.D., Burkesville
Treasurer: Robert B. Chambliss, M.D., Burkesville
Delegate to KMA: Robert B. Chambliss, M.D.
Alternate: Joseph Schickel, M.D.

Floyd
President: Russell Hall, M.D., Prestonsburg
Vice President: James Holbrook, M.D., Prestonsburg
Secretary-Treasurer: William B. Cook, M.D., Prestonsburg
Delegate to KMA: Lowell Martin, M.D., Martin
Alternate: James Holbrook, M.D.

Harlan
President: Howard L. Elliot, M.D., Harlan
Vice President: Earl L. Carpenter, M.D., Lynch
Secretary-Treasurer: Wilfred F. Jones, Jr., M.D., Harlan
Delegates to KMA: Doane Fischer, M.D., Harlan
Henry Evans, M.D., Harlan
Alternates: Walter H. Stepchuck, M.D., Evarts
Gilbert L. Hamilton, M.D., Harlan

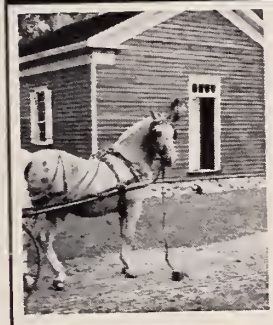
Knox
President: R. E. Hayden, M.D., Barbourville
Vice President: T. R. Davies, M.D., Barbourville
Secretary-Treasurer: Harold L. Bushey, M.D., Barbourville
Delegate to KMA: Harold L. Bushey, M.D.
Aternate: F. X. Sommer, M.D., Barbourville

Leslie
President: Mary L. Wiss, M.D., Hyden
Vice President: Mary Pauline Fox, M.D., Hyden
Secretary-Treasurer: Mary Pauline Fox, M.D.
Delegate to KMA: Mary Pauline Fox, M.D.
Alternate: Mary L. Wiss, M.D.

Montgomery
President: Donald C. McFadden, M.D., Mt. Sterling
President-Elect: William McKenna, M.D., Mt. Sterling
Vice President: William McKenna, M.D.
Secretary-Treasurer: Robert J. Salisbury, M.D., Mt. Sterling
Delegate to KMA: Robert J. Salisbury, M.D.
Alternate: Donald C. McFadden, M.D.

(Continued on page 298)

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In a recent series of clinical studies, Erythrocin-Sulfas was used to treat 516 febrile cases of suspected bacterial infection. Of these, *85.5% were completely afebrile within 48 hours.*

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FOR OPTIMAL PATIENT ACCEPTANCE

Three forms were used in the studies, prescribed according to the age and personal preferences of individual patients:

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Please see Brief Summary on next page.

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*Clinically cured included patients with complete symptomatic relief and those who had partial symptomatic relief within 72 hours with subsequent clinical cure.

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BRIEF SUMMARY FOR
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Indications For mixed infections which are more susceptible to the combination than to either agent alone. These may include susceptible gram-positive and/or gram-negative mixed infections. Not recommended in the treatment of infections expected to respond to full therapeutic doses of the antibiotic or sulfonamide alone.

Contraindications Known hypersensitivity to erythromycin or sulfonamides. Because of the possibility of kernicterus with sulfonamides, do not use in pregnancy at term, in premature or in newborn infants during first week of life.

Warnings As with other forms of sulfonamide therapy, use only after critical appraisal in patients with liver or kidney damage, urinary obstruction, or blood dyscrasias. Deaths have been reported from hypersensitivity reactions and blood dyscrasias following use of sulfonamides. Perform blood counts and liver and kidney function tests when used intermittently or for long periods.

Precautions, Side Effects Use sulfonamides with caution in patients with a history of allergy, including asthma. Mild allergic reactions (such as urticaria and other skin rashes) may occur. Serious allergic reactions have been extremely infrequent; if encountered appropriate countermeasures (e.g. epinephrine, steroids, etc.) should be administered and the drug withdrawn. Assure adequate fluid intake to prevent crystalluria and institute alkali therapy if indicated. In prolonged therapy, or when high dosage is used, maintain an alkaline urine. If oliguria occurs, discontinue therapy. Occasionally mild abdominal discomfort, nausea or vomiting may occur with erythromycin; generally improved by reduction of dosage.

If overgrowth of nonsusceptible organism occurs, withdraw the drug and institute appropriate treatment.

Adverse Reactions Sulfonamide therapy may be associated with headache, nausea, vomiting, diarrhea, hepatitis, pancreatitis, blood dyscrasias, neuropathy, drug fever, skin rash, urticaria, injection of the conjunctiva and sclera, petechiae, purpura, hematuria and crystalluria. 803446



(Continued from page 294)

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- Secretary-Treasurer: Wallas N. Bell, M.D., Sturgis
- Delegate to KMA: Wallas N. Bell, M.D.

SPECIAL ARTICLE

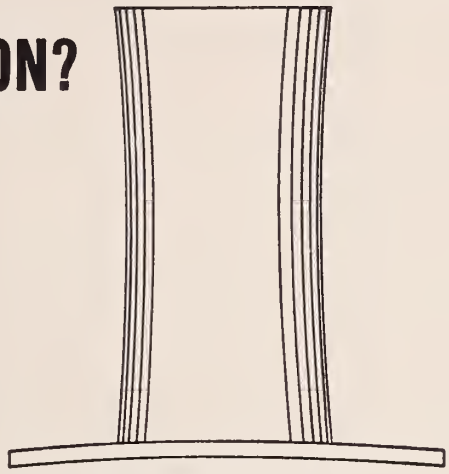
(Continued from page 272)

in controversy is $100 or more. If the amount in controversy is $1,000 or more, the individual is entitled to court review of the claim if he is dissatisfied with the hearing.

(The Kentucky Medical Association's Advisory Committee on Title XVIII, realizing that situations will develop where there is disagreement between medical staffs of the provider and intermediary, will recommend to the KMA Board of Trustees that a committee be established to review such cases and make recommendations.—The Editors)

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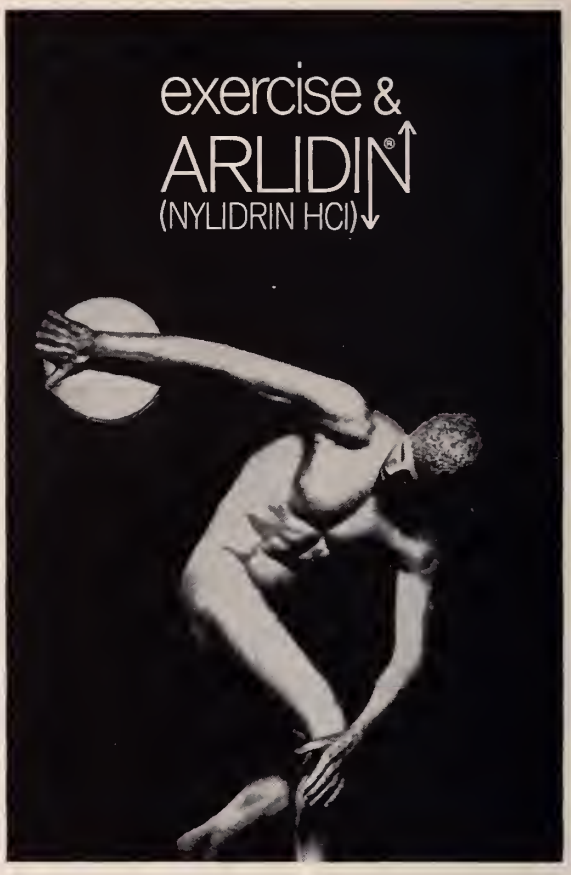
The Louisville Society of Anesthesiologists elected officers for the coming year at its regular monthly meeting January 7 at Hasenour's. The new officers are Lolita S. Weakly, M.D., president-elect; Richard B. Salsitz, M.D., president; and Dillard R. Summay, M.D., secretary-treasurer.

NEWS ITEMS

Robert Pfeiler, M.D., a psychiatrist, is the new executive director of the Region 8 MH-MR Program in Louisville. A 1956 graduate of the University of Nebraska Medical School, Doctor Pfeiler completed his internship at William Beaumont Army Hospital, Texas, in 1957 and his residency training at the Menninger School of Psychiatry, Topeka, Kan.

Richard W. Carpenter, M.D., an internist, is associated in practice with Warren H. Proudfoot, M.D., in Morehead. Doctor Carpenter graduated from Vanderbilt University School of Medicine in 1962 and completed his internship and residency training at Indiana University Medical Center.

M. L. Rishi, M.D., is the new medical director of District One TB Hospital in Madisonville. Doctor Rishi, a 1957 graduate of King Edward Medical College, Lahore, was formerly assistant medical director at District Five TB Hospital in London.







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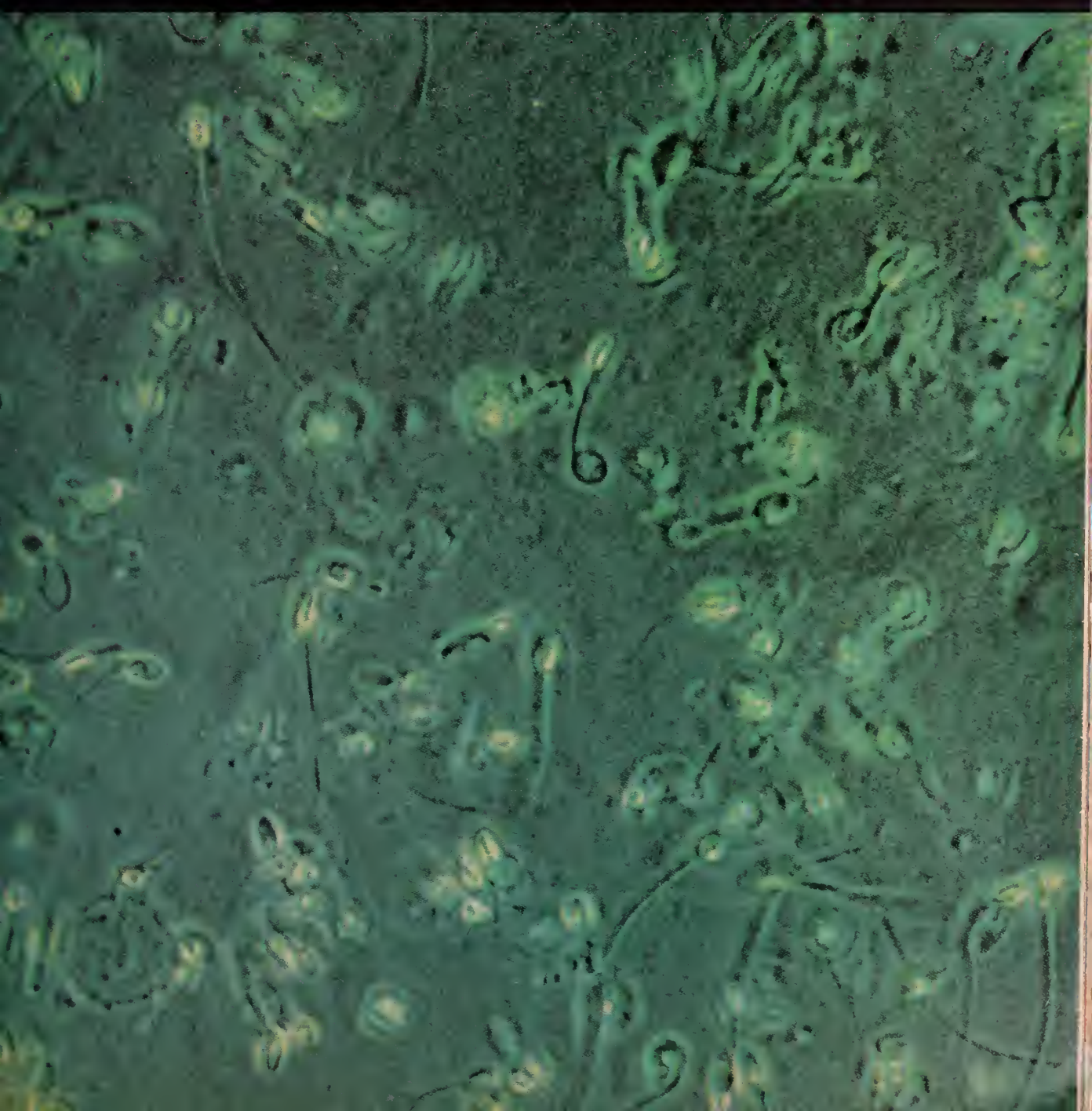
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330–8/6135

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Reduction of oral contraceptive dosage to the lowest effective levels is a well-accepted principle of conservative medical practice. In keeping with this view, Norinyl is now also available as Norinyl-1, containing exactly one half the previous dosage of norethindrone and mestranol. Clinical experience has established that effective fertility control can be achieved with the same degree of reliability and safety with new Norinyl-1 when taken as directed.

What about switching patients from higher dosage forms?

In transferring patients to low-dose Norinyl-1 from higher-dosage oral contraceptives, some breakthrough bleeding may occur in the early cycles. In the majority of cases the bleeding episode is mild and self-limited. The long-term advantages of the lower dosage form should be weighed against the inconvenience of possible breakthrough bleeding in the individual patient.

Contraindications: 1. Patients with thrombophlebitis or with a history of thrombophlebitis or pulmonary embolism. 2. Liver dysfunction or disease. 3. Patients with known or suspected carcinoma of the breast or genital organs. 4. Undiagnosed vaginal bleeding.

Warnings: 1. Discontinue medication pending examination if there is sudden partial or complete loss of vision or if there is a sudden onset of proptosis, diplopia or migraine. If examination reveals papilledema or retinal vascular lesions, medication should be withdrawn. 2. Since the safety of NORINYL-1 (norethindrone 1 mg. with mestranol 0.05 mg.) in pregnancy has not been demonstrated, it is recommended that for any patient who has missed two consecutive periods, pregnancy should be ruled out before continuing the contraceptive regimen. If the patient has not adhered to the prescribed schedule, the possibility of pregnancy should be considered at the time of the first missed period. 3. Detectable amounts of the active ingredients in oral contraceptives have been identified in the milk of mothers receiving these drugs. The significance of this dose to the infant has not been determined.

Precautions: 1. The pretreatment physical examination should include special reference to breast and pelvic organs, as well as a Papanicolaou smear. 2. Endocrine and possibly liver function tests may be affected by treatment with NORINYL-1. Therefore, if such tests are abnormal in a patient taking NORINYL-1 it is recommended that they be repeated after the drug has been withdrawn for two months. 3. Under the influence of estrogen-progestogen preparations, preexisting uterine fibromyomata may increase in size. 4. Because these agents may cause some degree of fluid retention, conditions that may be influenced by this factor, such as epilepsy, migraine, asthma, cardiac or renal dysfunction, require careful observation. 5. NORINYL-1 should be used with caution in patients with a history of cerebrovascular accident. 6. In relation to breakthrough bleeding, and as in all cases of irregular bleeding *per vaginam*, nonfunctional causes should be borne in mind. In cases of undiagnosed vaginal bleeding, adequate diagnostic measures are indicated. 7. Patients with a history of psychic depression should be carefully observed and the drug discontinued if the depression recurs to a serious degree. 8. Any possible influence of prolonged NORINYL-1 therapy on pituitary, ovarian, adrenal, hepatic or uterine function awaits further study. 9. A decrease in glucose tolerance has been observed in a small percentage of patients on oral contraceptives. The mechanism of this decrease is obscure. For reason, diabetic patients should be carefully observed while receiving NORINYL-1 therapy. 10. Because of the occasional occurrence of thrombophlebitis and pulmonary embolism in patients taking oral contraceptives, the physician should be alert to the earliest manifestations of the disease. 11. Because of the effects of estrogens on epiphyseal closure, NORINYL-1 should be used judiciously in young patients in whom bone growth is not complete. 12. The age of the patient constitutes no absolute limiting factor, although treatment with NORINYL-1 may mask the onset of the climacteric. 13. The pathologist should be advised of NORINYL-1 therapy when relevant specimens are submitted.

Side effects observed in patients receiving oral contraceptives: The following adverse reactions have been observed in patients receiving oral contraceptives: nausea, vomiting, gastrointestinal symptoms (such as abdominal cramps and bloating), breakthrough bleeding, spotting, change in menstrual flow, amenorrhea, edema, chloasma or melasma, breast changes (tenderness, enlargement and secretion), change in weig (increase or decrease), changes in cervical erosion and cervical secretio suppression of lactation when given immediately postpartum, cholestatic jaundice, migraine, rash (allergic), rise in blood pressure in susceptible individuals, mental depression.

Although the following side effects have been reported in users of oral contraceptives, no cause and effect relationship has been established: anovulation post-treatment, premenstrual-like syndrome, change in libido, changes in appetite, cystiti like syndrome, headache, nervousne dizziness, fatigue, backache, hirsutism, loss of scalp hair, erythema multiforme, erythema nod sum, hemorrhagic eruption, itching

The following occurrences have bee observed in users of oral contraceptives (a cause and effect relationship has been neither established nor dis proved): thrombophlebitis, pulmona embolism, neuro-ocular lesions.

The following laboratory results may be altered by the use of oral contraceptives: increased sulfobromophthalein and other hepatic function tests, coagulation tests (increase in prothrombin, Factors VII, VIII, IX and X), thyroid function (increase in PBI and butanol extractable protein-bound iodine an decrease in T^3 values), metyrapone test, pregnanediol determination.

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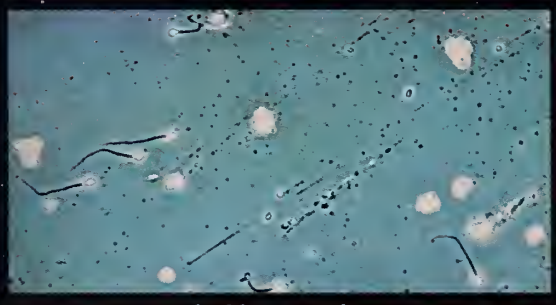
Here's why Norinyl-1 makes medical sense.

The effectiveness of Norinyl-1 as a low-dose oral contraceptive may be explained by its possible multiple action. In addition to its primary action of suppression of ovulation, Norinyl-1 may offer additional protective mechanisms... (1) creation of a cervical mucus that may be hostile to sperm penetration, and (2) development of an endometrium that may be out of phase with nidation. These effects are illustrated below.

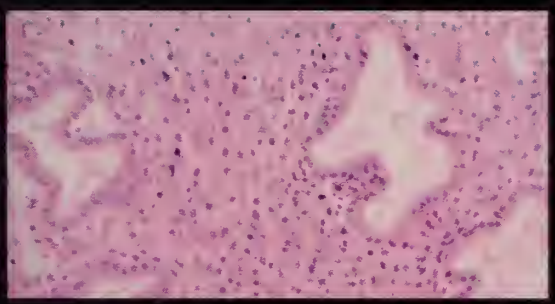
Untreated Patient



Cervical mucus at midcycle is usually thin and watery, with Spinnbarkeit (stretchability) of 15 to 20 cm.



Spermatozoa appear healthy, active, freemoving.

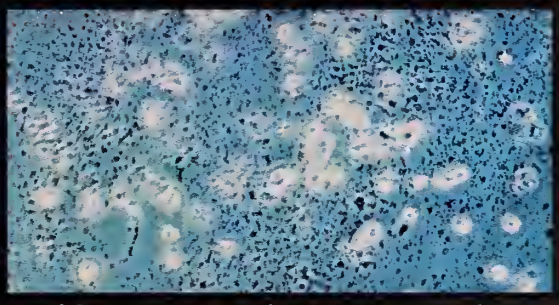


Endometrium of untreated patient is receptive to the fertilized ovum during secretory phase.

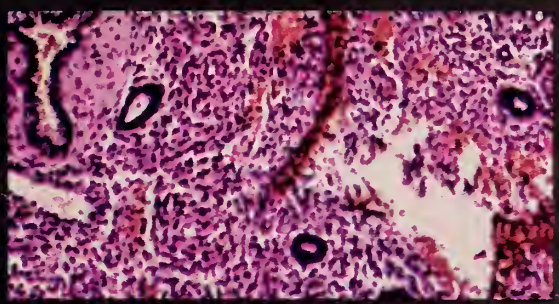
Norinyl-1 Patient



Cervical mucus at midcycle is scanty, viscous—with Spinnbarkeit of 1 cm. or less.



Immobile spermatozoa as they appear in cervical mucus taken from patient treated with Norinyl-1.



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References: 1. Shuman, C.: Am. J. Med. Sci., 225:54, 1953. 2. Perchuk, E., et al.: Angialogy, 12:102, 1961. 3. Rawls, W., et al.: Med. Times, 87:818, 1959.

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A Short-Term Survey

(Continued from page 266)

only one culture was studied from over two-thirds of the patients, it was impossible to evaluate the possibility of primary drug resistance.

Summary

Over a one month period 274 cultures of mycobacteria were obtained from 188 patients in the six Kentucky state tuberculosis hospitals. The majority of cultures (97%) was obtained from a sputum specimen. *M. Tuberculosis var. hominis* represented 94% of the cultures; the remainder, 6%, were atypical mycobacteria.

This study was supported by the Kentucky Tuberculosis and Respiratory Disease Association.

The authors wish to thank the directors and staffs of the six Kentucky State Tuberculosis Hospitals for their cooperation and assistance.

References

1. McDermott, W.: "Antimicrobial Therapy of Pulmonary Tuberculosis", *Bull. WHO* 23:427-461, 1950.
2. Edwards, P. Q.: and Edwards, L. B.: "Story of the Tuberculin Test from an Epidemiological Viewpoint", *Am. Rev.. Resp. Dis.*, 81:37, 1960.
3. Huempfner, H. R.; Fulmer, H. S.; and Deuschle, K. W.: "Patterns of Mycobacterial Isolations from a Tuberculosis Hospital Population in Kentucky," *Am. Rev. Resp. Dis.*, In Press.
4. *Handbook of Tuberculosis Laboratory Methods*, VA-Armed Forces Cooperative Study on the Chemotherapy of Tuberculosis, Washington, D. C., 1962.
5. Mitchison, D. A., and Selkon, J. B.: "Bacteriological Aspects of a Survey of the Incidence of Drug-resistant Tubercle Bacilli Among Untreated Patients", *Tubercle*, 38:85, 1957.

PUBLIC HEALTH PAGE

(Continued from page 228)

phoma and other generalized malignancies; persons on steroids, alkylating drugs, antimetabolites and irradiation; and patients currently experiencing severe febrile illness.[2,3]

Unfortunately, there is no reliable data concerning central nervous system complications of mumps illness and mortality related to this disease. The complication of most concern is orchitis, which may develop in up to 20 percent of males acquiring mumps after puberty. Sterility, however, rarely if ever occurs. Little or nothing is known about the occurence and hazards of oophoritis due to mumps in females.

Definitive recommendations for utilization of mumps live virus vaccine will not be forthcoming until more is learned about the epidemiology, complications and sequellae of natural mumps and about the duration of immunity induced by this new vaccine. Meanwhile, "mumps immunization should not be allowed to compromise the effectiveness of public health programs of already established importance."[3]

References

1. Hilleman, M. R., et al: Live Attenuated Mumps-Virus Vaccine. *New England Journal of Medicine* 278:5 pp. 277-232 Feb. 1, 1968.
2. LYOVAC MUMPSVAX® package insert.
3. National Communicable Disease Center; Recommendation of the Public Health Service Advisory Committee on Immunization Practices: *Mumps Vaccine Morbidity and Mortality Weekly Report* 16:151 p. 430, Dec. 23, 1967.
4. American Academy of Pediatrics; Committee on the Control of Infectious Diseases. *Mumps Virus Vaccine, Newsletter (Supp.)* Dec. 15, 1967.

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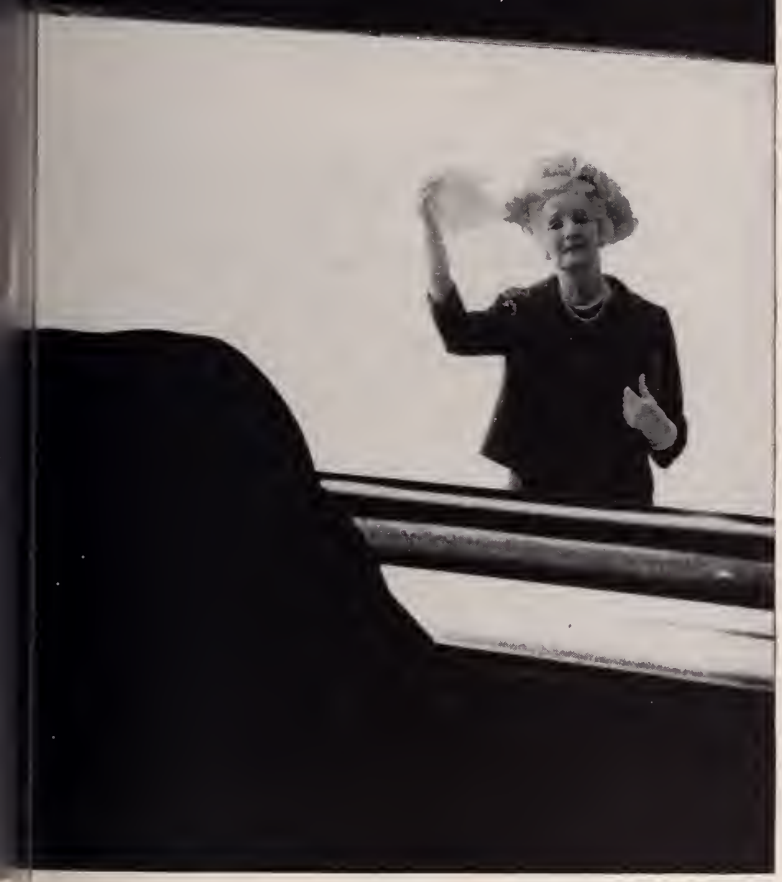
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Warning: Clinical reports have suggested that there may be a risk of teratogenesis associated with the use of this compound during the first trimester of pregnancy. Unless, in the opinion of the prescribing physician, the potential benefits outweigh the possible risks, Tofrānil should not be used during the first trimester of pregnancy.
Cardiovascular complications, including myocardial infarction and arrhythmias, have occasionally occurred in susceptible individuals. Patients with cardiovascular disease should be given the drug only under careful observation and in low dosage.
Precautions: Since suicide is always a possibility in severely depressed patients and one which may persist until significant remission occurs, such patients should be carefully supervised during early treatment with Tofrānil. Some severely depressed patients may also require hospitalization and/or concomitant electroconvulsive therapy.
Because of its anticholinergic effect, caution should be observed in prescribing Tofrānil for patients with increased intraocular pressure.
In rare instances, transient cardiac arrhythmias have occurred in hyper thyroid patients and in patients receiving thyroid medication when Tofrānil was added to the regimen.
Imipramine may block the pharmacologic activity of guanethidine and other related adrenergic neuron-blocking agents.
The drug is not recommended at the present time in patients under 12 years of age.
Adverse Reactions: Dryness of the mouth, tachycardia, constipation, disturbances of accommodation, sweating, dizziness, weight gain, urinary frequency or retention, nausea and vomiting, peripheral neuritis, mild parkinson-like syndrome, tremors, rare cases of falling in elderly patients, confusional states (with such symptoms as hallucinations and disorientation), activation of psychosis in schizophrenics and agitation (inclu

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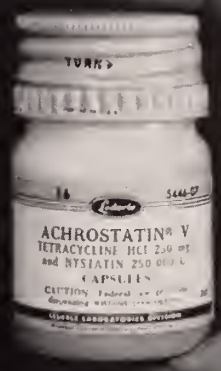
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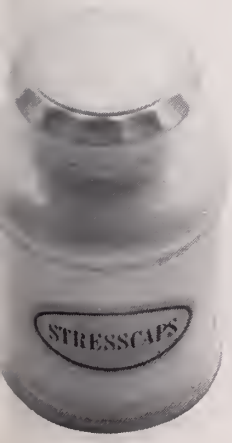
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Precautions: In the elderly and debilitated, and in children over six, limit to smallest effective dosage (initially 10 mg or less per day) to preclude ataxia or oversedation, increasing gradually as needed and tolerated. Not recommended in children under six. Though generally not recommended, if combination therapy with other psychotropics seems indicated, carefully consider individual pharmacologic effects, particularly in use of potentiating drugs such as MAO inhibitors and phenothiazines. Observe usual precautions in presence of impaired renal or hepatic function. Paradoxical reactions (e.g., excitement, stimulation and acute rage) have been reported in psychiatric patients and hyperactive aggressive children. Employ usual precautions in treatment of anxiety states with evidence of impending depression; suicidal tendencies may be present and protective measures necessary. Variable effects on blood coagulation have been reported very rarely in patients receiving the drug and oral anticoagulants; causal relationship has not been established clinically.

Adverse Reactions: Drowsiness, ataxia and confusion may occur, especially in the elderly and debilitated. These are reversible in most instances by proper dosage adjustment, but are also occasionally observed at the lower dosage ranges. In a few instances syncope has been reported. Also encountered are isolated instances of skin eruptions, edema, minor menstrual irregularities, nausea and constipation, extrapyramidal symptoms, increased and decreased libido—all infrequent and generally controlled with dosage reduction; changes in EEG patterns (low-voltage fast activity) may appear during and after treatment; blood dyscrasias (including agranulocytosis), jaundice and hepatic dysfunction have been reported occasionally, making periodic blood counts and liver-function tests advisable during protracted therapy.

Usual Daily Dosage: Individualize for maximum beneficial effects. *Oral*—Adults: Mild and moderate anxiety and tension, 5 or 10 mg t.i.d. or q.i.d.; severe states, 20 or 25 mg t.i.d. or q.i.d. Geriatric patients: 5 mg b.i.d. to q.i.d. (See Precautions.)

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THE JOURNAL

OF THE KENTUCKY MEDICAL ASSOCIATION



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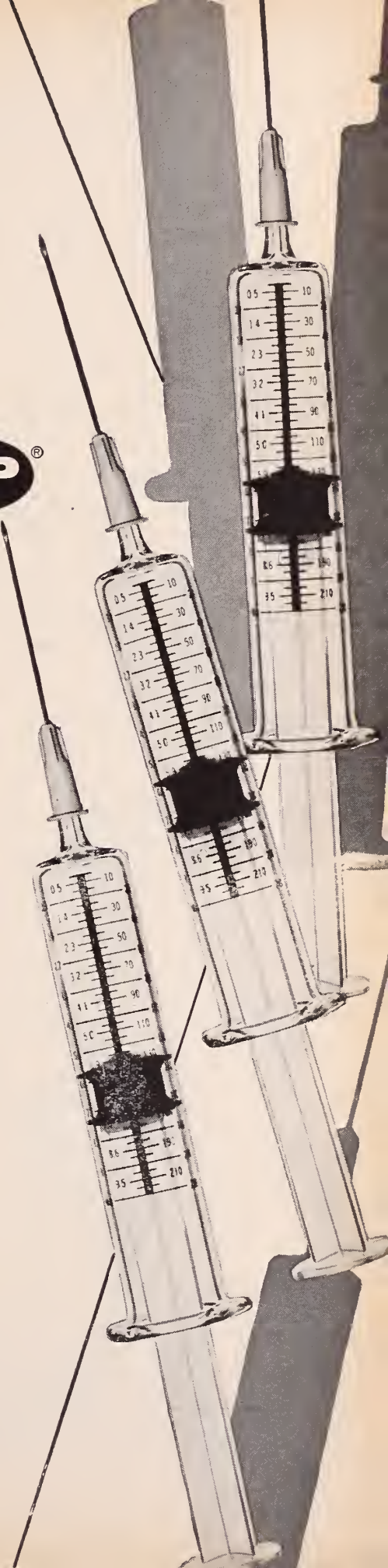
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Precautions—Overgrowth of nonsusceptible organisms may occure. Constant observation is essential. If new infections appear, appropriate measures should be taken. In infants, increased intracranial pressure with bulging fontanels has been observed. All signs and symptoms have disappeared rapidly upon cessation of treatment.

Side Effects—Gastrointestinal system—anorexia, nausea, vomiting, diarrhea, stomatitis, glossitis, enterocolitis, pruritus ani. Skin—maculopapular and erythematous rashes. A rare case of exfoliative dermatitis has been reported. Photosensitivity; onycholysis and discoloration of the nails (rare). Kidney—rise in BUN, apparently dose related. Transient increase in urinary output, sometimes accompanied by thirst (rare). Hypersensitivity reactions—urticaria, angioneurotic edema, anaphylaxis. Teeth— dental staining (yellow-brown) in children of mothers given this drug during the latter half of pregnancy, and in children given the drug during the neonatal period, infancy and early childhood. Enamel hypoplasia has been seen in a few children. If adverse reaction or idiosyncrasy occurs discontinue medication and institute appropriate therapy.

Average Adult Daily Dosage: 150 mg q.i.d. or 300 mg b.i.d. Should be given 1 hour before or 2 hours after meals, since absorption is impaired by the concomitant administration of high calcium content drugs, foods and some dairy products. Treatment of streptococcal infections should continue for 10 days, even though symptoms have subsided.

In the treatment of syphilis a dosage schedule of a total of 12 to 18 Gm. given in equally divided doses over a period of 10 to 15 days should be followed. Close follow-up observation of the patient is recommended, including appropriate laboratory tests, since demethylchlortetracycline has not had adequate evaluation in all stages of syphilis. Spinal fluid examination should be included as part of this follow-up.

Acute gonococcal anterior urethritis in males has been treated effectively with a single dose of 600-900 mg. of DECLOMYCIN Demethylchlortetracycline. Individuals unable to tolerate large single doses due to gastrointestinal side effects may be treated with 150 mg. every 6 hours for a minimum of 4 doses or 300 mg. every 12 hours for a minimum of 2 doses. Females should be treated with a dosage of 150 mg. every 6 hours or 300 mg. every 12 hours until a cure is effected.

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MESSAGE FROM THE PRESIDENT



Support for Our Hospitals

HOSPITALS have a poor image with many physicians because of the action of their national organization in favoring passage of Medicare, and their efforts to control the hospital-based physician. In some medical circles there is scant sympathy for the hospitals in their new role as the whipping-boy of an Administration concerned about "sky-rocketing costs of medical care".

While the National Advisory Commission on Health Man-Power found elements of hospital costs that deserve study, it is unfair for HEW Secretary Gardner to condemn hospital management as "just peeping into the Twentieth Century". This not only demeans the trained professional hospital administrators, but is a gratuitous insult to the thousands of industrialists and businessmen across the country who serve on the Boards of our voluntary hospitals.

We need to remember that we have substantially contributed to making the hospitals the expensive operations that they are. As individuals, as medical staffs and through our collective Joint Commission on the Accreditation of Hospitals, we have pointed the hospitals toward ever higher (and more expensive) standards of excellence in patient care.

We must help the hospitals in this time of difficulty. We can work with our administrator on the local level to develop savings on personnel and operating procedures. We can intensify our efforts in educating their personnel, both in organized classes and by daily precept on our rounds. And when the patient complains about his outrageous hospital bill, we can remind him not only of the fire-proof structure, the nursing care and the expensive equipment; we can also remind him that the present Administration, self-righteously indignant at the cost of health care, managed to increase hospital costs at least $2.00 per bed per day by the enactment of the latest minimum-wage law.

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Side Effects: Ethoheptazine and aspirin may occasionally cause nausea, vomiting, epigastric distress, and rarely dizziness. Overdosage may result in CNS depression (drowsiness and lightheadedness) or CNS stimulation and salicylate intoxication (requires induced vomiting or gastric lavage, specific parenteral electrolyte therapy for ketoacidosis and dehydration, and observation for hypoprothrombinemic hemorrhage [usually requires whole blood transfusions]). Meprobamate may cause drowsiness, ataxia and rarely allergic or idiosyncratic reactions. These reactions, sometimes severe, can develop in patients receiving only 1 to 4 doses who have had no previous contact with meprobamate. Mild reactions are characterized by urticarial or erythematous maculopapular rash. Acute nonthrombocytopenic purpura with petechiae, ecchymoses, peripheral edema and fever have been reported. If allergic reaction occurs, meprobamate should be stopped and not reinstituted. Severe reactions, observed very rarely, include angioneurotic edema, bronchial spasms, fever, fainting spells, hypotensive crises (1 fatal case), anaphylaxis, stomatitis and proctitis (1 case) and hyperthermia. Treat symptomatically such as with epinephrine, antihistamine and possibly hydrocortisone. A few cases of leucopenia, usually transient, have been reported following continuous use. Rarely, cases of aplastic anemia (1 fatal case), thrombocytopenic purpura, agranulocytosis, and hemolytic anemia have been reported; almost always, in the presence of known toxic agents.

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PREVENTION OF HIGHWAY INJURY: Melven L. Selzer, M.D., et.al., eds.; Published by the Highway Research Institute, Ann Arbor, Michigan, 1967; 294 Pages; Price $6.50.

This book contains all the papers presented in a symposium held at the University of Michigan in April, 1967, and sponsored by the Medical School and their Highway Safety Research Institute. These presentations are made by the most prominent names in Highway Safety research in the world today. In addition to such famous American investigators as Colonel John P. Stapp, of the Air Force, Derwyn Severy, of U. C. L. A., Julian Waller, of the California Department of Health, and William Haddon, of the National Highway Safety Bureau, there are representatives from Canada, Germany, England and Sweden.

The papers are quite properly grouped to cover various aspects of the injury, including the alcoholic driver, visual and medical impairment, and the biomechanics of injury, such as face, neck, spinal, thoracic, and abdominal traumata. There is also a collection of reports on the so-called "second collision" — that one involving the impact of the passenger with the inside of the car after the initial collision has occurred.

This work is for the student of automobile injuries who wants to know more about their causes and their prevention. It is also for the concerned physician who is not just content to patch people up after injuries, but who really wants to help prevent these injuries in the first place.

There are many more excuses for not reading this book than there are reasons for reading it, but it is as modern as any on this subject and is heartily recommended to the concerned physician.

William K. Keller, M.D.

SYMPOSIUM ON GLAUCOMA: Mansour F. Armaly, M.D., et. al., eds.; Published by the C. V. Mosby Company, St. Louis, 1967; 306 Pages; Price $17.50.

This book records the papers given and the words of a panel of ophthalmologists at the fifteenth annual session of the New Orleans Academy of Ophthalmology, which was held February 27 to March 4, 1966. The subjects of history, pathology, diagnosis and treatment, both medical and surgical, of glaucoma were considered and discussed.

As stated in the preface, "The panelists of this symposium are all outstanding ophthalmologists or ocular pathologists who have a special interest in glaucoma." This group of lecturers are true authorities and have world renown as the result of their pathfinding work and writing.

The meeting recorded herein was one attended by students and specialists in the field of ophthalmology; and for this reason, this book would be of particular interest and usefulness to those who are specialists in this field. The first 186 pages cover eight chapters containing the latest investigative work and the latest attitudes in handling the variables of glaucoma treatment. The last 100 pages are a record of round-table-panel discussions. Questions from the attending ophthalmologists pertaining to their most mystifying and unusual cases of glaucoma were presented to this august panel. It was most illuminating to learn of their opinions in diagnosis and treatment, as well as to know wherein the differences of opinion could and do exist, even with the "authorities."

I feel that this book would be a valuable adjunct to the library of the student and/or practitioner of ophthalmology.

Charles O. Bruce, Jr., M.D.

NEUROPSYCHIATRY IN WORLD WAR II, Volume I: Col. Robert S. Anderson, M.D., ed.; Published by U.S. Government Printing Office, 1967; 826 Pages; Price $7.50.

The purpose of this book is to record the History of Neuro-Psychiatric Medicine in the World War II era as it applies to the military establishment. The primary concern of this volume is with the chronology of what happened in the United States during that period of time. The book accomplishes its purpose. It records "The administrative and professional frustrations, failures and successes as they occurred in the Zone of Interior".

Insofar as the medical profession is concerned this book should be required reading for career medical officers in the Armed Services. It delineates clearly the bureaucratic intricacies of medicine in that milieu and may well serve as a guide to future developments in administrative military neuropsychiatry.

For the practicing physician (military or civilian) its value is somewhat limited as most of the clinical information which it records is more readily available in other publications. However, from a historical point of view it constitutes a reference work of great potential worth.

In terms of composition each chapter essentially stands alone and thus some duplication in background information is unavoidable. This does not detract from the surprising "readability" of the volume.

The authors have successfully assembled, digested and summarized a vast body of documents, and using personal experiences as a catalyst have assimilated these into a coherent and comprehensive historical record.

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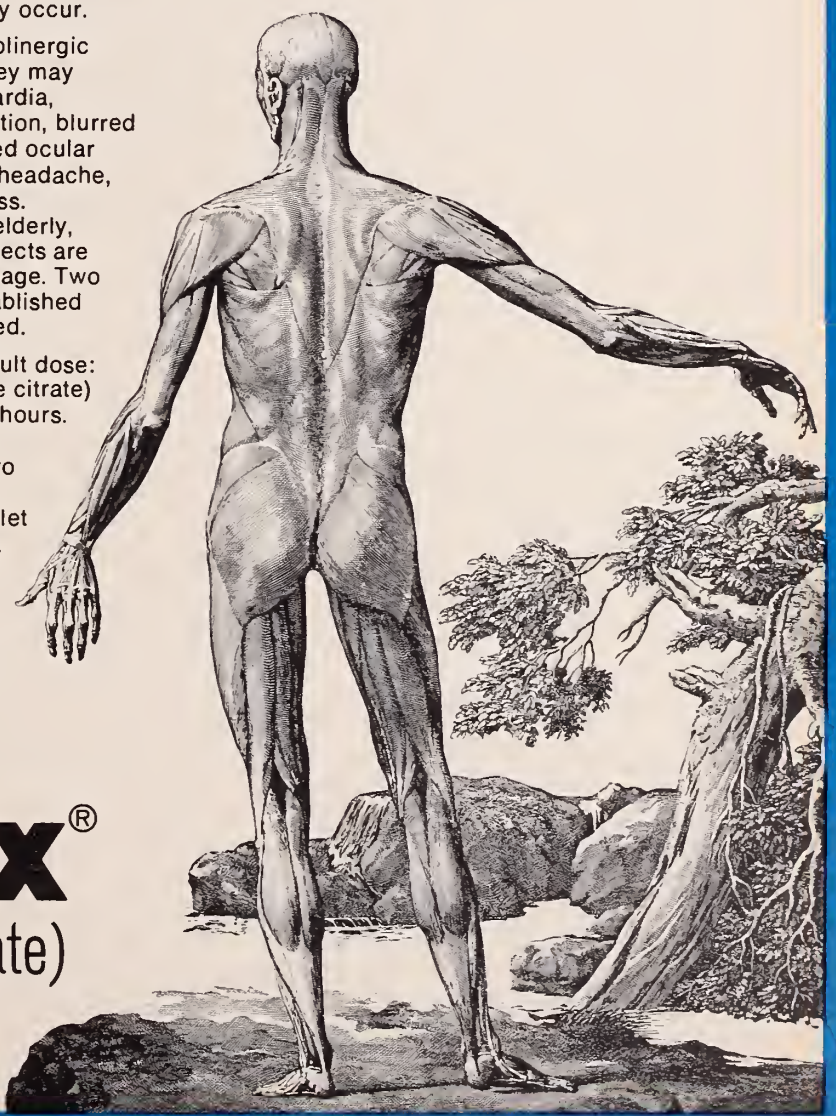
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e propylene glycol vehicle
Synalar Solution possesses
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portant, Synalar Solution
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acy of a potent, truly
anced topical corticosteroid.

Contraindications: Tuberculous, fungal, and most viral lesions of the skin (including herpes simplex, vaccinia, and varicella). Not for ophthalmic use. Contraindicated in individuals with a history of hypersensitivity to any of the components.

Precautions: In some patients with dry lesions, the solution may increase dryness, scaling, or itching. Application to denuded or fissured areas, such as genital or perianal sites, may produce a burning or stinging sensation. If this persists and dermatitis does not improve, discontinue medication. Although propylene glycol has antiseptic activity, there should be careful initial evaluation and follow-up of infected sites. Incomplete response or exacerbation of lesions may be due to true infection, which requires susceptibility testing and appropriate therapy. On the other hand, saprophytic or low grade infections may clear spontaneously under the influence of Synalar Solution alone. Where severe local infection or systemic infection exists, the use of systemic antibiotics should be considered, based on susceptibility testing. While topical steroids have not been reported to have adverse effect on pregnancy, the safety of their use on pregnant females has not absolutely been established. Therefore, they should not be used extensively on pregnant patients, in large amounts, or for prolonged periods of time.

Side Effects: Side effects are not encountered ordinarily with topically applied corticosteroids. As with all drugs, however, a few patients may react unfavorably to Synalar under certain conditions.

Availability: Synalar (fluocinolone acetonide) Solution 0.01% in a propylene glycol vehicle with citric acid as preservative. 20 and 60 cc. plastic squeeze bottles. *Also available:* Synalar (fluocinolone acetonide) Cream 0.025% —5, 15 and 60 Gm. tubes and 425 Gm. jars. Cream 0.01% —15, 45 and 60 Gm. tubes and 120 Gm. jars. Ointment 0.025% —15 and 60 Gm. tubes. Neo-Synalar® (neomycin sulfate 0.5% [0.35% neomycin base], fluocinolone acetonide 0.025%) Cream —5, 15 and 60 Gm. tubes.

fluocinolone acetonide — an original steroid from
SYNTEX
LABORATORIES INC., PALO ALTO, CALIF.

Synalar®
(fluocinolone acetonide)
Solution
0.01%

An invisible topical





THE INSURANCE PAGE



Medicaid Administration

THE Congress in 1965 passed Public Law 89-97 amending the Social Security Law by adding Titles XVIII and XIX, Medicare and Medicaid. Administration of Title XVIII was specifically delegated to health insurance carriers establishing the principle of excluding government from the actual conduct of this program.

Title XIX, on the other hand, provides states and local welfare agencies matching aid in funding their own programs for the medically indigent. It was described as a program to "bring the medically indigent into the mainstream of medical care." It was deliberately designed to permit the states to implement their programs in conformity with their individual requirements and their own established patterns of medical assistance.

That it was an error to give the states such wide latitude without first defining the objectives of Title XIX and establishing basic principles and guidelines for its implementation is now appallingly evident.

Originally the storm center of controversy, Title XVIII, Medicare, has created little difficulty in actual practice. On the other hand, Title XIX, Medicaid, has been since its inception, and still is, a problem to government, physicians, and patients alike. In Title XIX, state and local governments were given the option of self-administration. Most states, in their implementing laws, wisely refrained from exercising the option and chose carrier operation. A few, notably New York, decided to operate their own programs through local welfare agencies.

The confusion and disorganization that resulted are a matter of record. Kentucky's program has been administered jointly by the Department of Economic Security and the Department of Health and has also proven unsatisfactory, to say the least.

Title XIX programs administered by carriers have, by contrast, showed smoother and more efficient operation. This is to be expected since carriers have several important capabilities that welfare agencies lack. They have two or three decades of experience in the administration of reimbursement programs; most of them have sophisticated systems of data processing which enable them to operate efficiently and cheaply. Finally, voluntary insurers have, over the years, developed a close relationship with the providers of services with well defined channels of information exchange and negotiation.

On the other hand, government is a relative newcomer to this field and has neither the know-how, the facilities, nor the personnel to assume the administration of a health care program which covers a large segment of our population.

The logical course for our state government is to transfer administration of the Medicaid program to a voluntary or commercial carrier, preferably Blue Shield. In this way it has discharged its obligation by providing funds and establishing mechanisms to alleviate a pressing social need.

Beyond this, the wisest course, and the one most in keeping with our tradition of private enterprise, would be for government at all levels to utilize the capabilities of the insurance industry to the fullest before undertaking the administration of health-service programs.

WILLIAM W. HALL, M.D.

Abbott Antihypertensive Building Blocks

A simplified approach to the practical management of hypertension



Enduron: (methyclothiazide) A basic building block for mild hypertensives



Excellent day-long Na^+ output, yet easy on the K^+

Enduron provides an excellent starting therapy. Your patien sodium excretion is greatly enhanced. Yet potassium loss is lo

The therapeutic action is smooth, and persists for a full 24 hou With Enduron you can prescribe convenient once-a-day dosa without skimping your patients on day-long thiazide effectivene

Of course, as with all thiazides, supplemental dietary potassiu should also be considered.

Use Enduron as a basic therapy in patients with mild to mc erate hypertension. A single 5-mg. tablet each day is ample most cases.

Once a day, every day

ENDURON

METHYCLOTHIAZIDE



See Brief Summary on final page of advertisement

Enduronyl: Its deserpidine component adds response in moderate hypertension



Less frequent rauwolfia side effects than with reserpine

When you wish to build further response, consider shifting to Enduronyl.

Enduronyl adds a building block of *deserpidine*. This is a purified rauwolfia alkaloid available only from Abbott. It adds good antihypertensive and tranquilizing activity. Yet its incidence of untoward effects, particularly lethargy and depression, is lower than with reserpine.

Enduronyl is available plain or Forte. The latter provides its variation where most helpful, by doubling the deserpidine.

Use Enduronyl for patients throughout the broad range of mild to moderately severe hypertension.

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ENDURONYL®

ETHYCLOTHIAZIDE 5 mg. with
SERPIDINE 0.25 mg. or (FORTE) 0.5 mg.

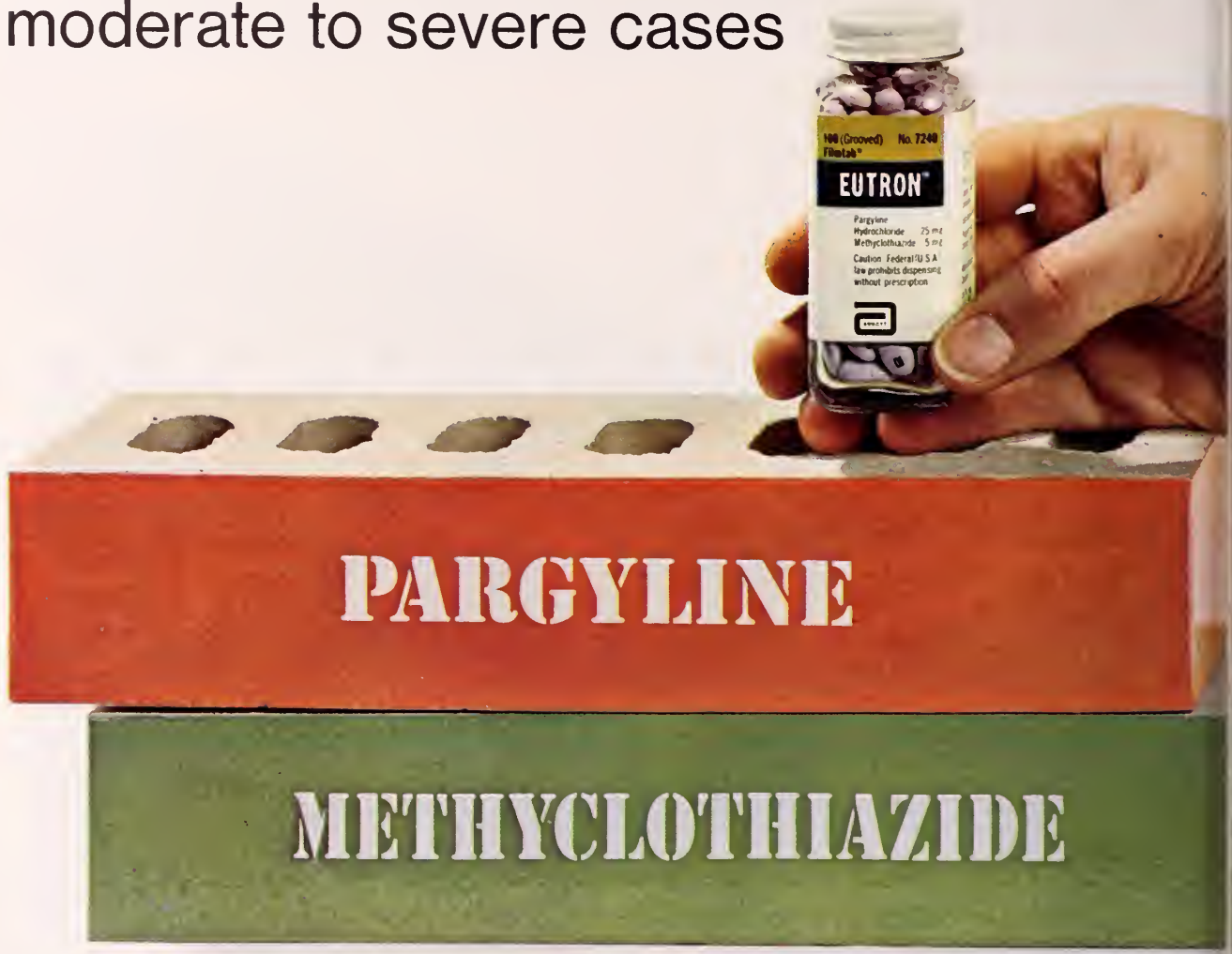
MILD TO MODERATE TO SEVERE



See Brief Summary on final page of advertisement

801094

Eutron: A unique combination for handling moderate to severe cases



Affords almost uniform diastolic reduction in all body positions

Eutron lowers diastolic pressures nearly equally, whether your patient is standing up or lying down.

Thus, in clinical trials, average *standing* diastolic readings were reduced from 112 pre-treatment to 90 post-treatment; *sitting* from 115 to 95; and *recumbent* from 112 to 94.

Note that following Eutron, the diastolic reductions were nearly alike in all three body positions.

Use Eutron for managing your moderate to severe cases. Its building blocks enhance each other; hence lesser doses often suffice

Once a day, every day

EUTRON™

PARGYLINE HYDROCHLORIDE 25 mg.
with METHYCLOTHIAZIDE 5 mg.

MILD TO MODERATE TO SEVERE



See Brief Summary on final page of advertisement

80109

ENDURON® | ENDURONYL®

METHYCLOTHIAZIDE

Each tablet contains
Methyclothiazide 5 mg. with
Deserpidine 0.25 mg. or 0.5 mg.

Indications: Edema and mild to moderate hypertension (Enduron), and mild to moderately severe hypertension (Enduronyl). More potent agents, if added, can be given at reduced dosage.

Contraindications: Sensitivity to thiazides; severe renal disease (except nephrosis) or shutdown; severe hepatic disease or impending hepatic coma (hepatic coma due to hypokalemia has been reported in patients on thiazides). Do not use Enduronyl in severe mental depression, suicidal tendencies, active peptic ulcer, or ulcerative colitis.

Warnings: Consider possible sensitivity where there is history of allergy or asthma. If added potassium is indicated, dietary supplementation is recommended. Reserve enteric-coated potassium tablets for cautious use only when necessary, as they may induce serious or fatal small bowel lesions (stenosis with or without ulceration), cause obstruction, hemorrhage, and perforation often requiring surgery; discontinue them immediately if abdominal pain, distention, nausea, vomiting, or g.i. bleeding occurs. Neither Enduron nor Enduronyl contains added potassium.

Precautions: Use thiazides cautiously in severe renal dysfunction, impaired hepatic function or progressive liver disease; also in pregnancy (bone marrow depression, thrombocytopenia, and altered carbohydrate metabolism have been reported in certain newborn). In surgery, thiazides may reduce response to vasopressors, and increase response to tubocurarine. Antihypertensive response may be enhanced following sympathectomy. Watch for electrolyte imbalance (e.g., hyponatremia) in all patients. In hypokalemia (especially in digitalized patients) give supplemental potassium. In hypochloremic alkalosis, give supplemental chloride.

Use rauwolfias with caution in patients with history of peptic ulcer. Rauwolfias with anesthetics may produce hypotension and bradycardia. Discontinue Enduronyl two weeks before elective surgery. Consider vagal blocking agents during emergency surgery. In epilepsy, adjust anticonvulsant dosage. In electroshock, shorten stimulus strength and duration. In occasional patients with depressive tendencies, rauwolfias may precipitate severe mental depression that usually disappears when drug is stopped.

Adverse Reactions: Thiazide reaction include blood dyscrasias (thrombocytopenia with purpura, agranulocytosis, aplastic anemia); elevation of BUN, serum uric acid or blood sugar; anorexia, nausea, vomiting, diarrhea, headache, dizziness, paresthesia, weakness, skin rash, photosensitivity, jaundice, symtomatic gout, and pancreatitis. Cutaneous vasculitis in the elderly has been reported with other thiazides. Adverse effects with deserpidine are qualitatively similar to those with reserpine, but their incidence is lower. These include nasal stuffiness, abdominal cramps or diarrhea, nausea, headache, weight gain, reduced libido and potency, peptic ulcer aggravation, epistaxis, skin eruption, asthma in susceptible patients, electrolyte imbalance, excessive salivation, and a reversible Parkinson's syndrome. Excessive drowsiness, fatigue, weakness, and nightmares may signal mental depression. Thrombocytopenia, purpura, and a symptom manifested by dull sensorium, deafness, uveitis, glaucoma, and optic atrophy are rare allergic reactions to other rauwolfias. Hypotension from antihypertensive agents may precipitate angina attacks in susceptible individuals. Usually adverse reactions disappear when drug is withdrawn.

EUTRON™

Each tablet contains
Pargyline Hydrochloride 25 mg.
with Methyclothiazide 5 mg.

Indications—Moderate to severe hypertension.

Contraindications—Pheochromocytoma, paranoid schizophrenia, hyperthyroidism and advanced renal failure. Not recommended in malignant hypertension, children under 12, pregnant patients.

Do not use with: centrally or peripherally acting sympathomimetic drugs; foods high in tyramine (e.g., aged and natural cheeses); parenteral reserpine or guanethidine; imipramine, amitriptyline, desipramine, nortriptyline or their analogues; other monoamine oxidase inhibitors; methyldopa or dopamine; separate Eutron and these agents by two weeks.

Sensitivity to thiazides; severe renal disease (except nephrosis) or shutdown; severe hepatic disease; impending hepatic coma from thiazide-induced hypokalemia.

Warnings—Patients: 1. No other drugs (particularly "cold preparations" and antihistamines), cheese or alcohol without physician's consent. 2. Promptly report orthostatic symptoms, severe headache, other unusual symptoms. 3. Angina pectoris or coronary artery disease patients must not increase physical activity with improved anginal symptoms or well-being.

Physicians: 1. Use antihistamines, hypnotics, sedatives, tranquilizers and narcotics (meperidine contraindicated) cautiously in reduced doses. 2. Stop Eutron two or more weeks before elective surgery; in emergency surgery reduce premedication (narcotics, sedatives, analgesics, etc.) to 1/4 to 1/5; carefully adjust anesthetic dosage to patient response. 3. Use cautiously in advanced renal failure. 4. Pargyline may induce hypoglycemia. 5. Consider possible sensitivity reactions when a history of allergy or asthma is present. 6. If potassium is indicated, dietary supplement is recommended; enteric-coated potassium tablets may induce serious or fatal small bowel lesions (stenosis with or without ulceration), cause obstruction, hemorrhage, and perforation frequently requiring surgery; discontinue medication immediately if abdominal pain, distention, nausea, vomiting or gastrointestinal bleeding occurs; Eutron does not contain added potassium. 7. Possible systemic lupus erythematosus has been reported for thiazides.

Precautions—Pargyline: Use cautiously at reduced dosage; caffeine, alcohol, antihistamines, barbiturates, chloral hydrate, other hypnotics, sedatives, tranquilizers, narcotics. Periodically do urinalyses, blood counts, liver function tests, etc. Use with caution in liver disease. Watch for orthostatic hypotension, especially in impaired circulation (e.g., angina pectoris, coronary artery disease, cerebral arteriosclerosis); also, augmented hypotension in concomitant febrile illnesses. Reduce or discontinue if hypotension is severe. In impaired renal function watch for cumulative drug effects, elevated BUN and other evidence of progressive renal failure; withdraw drug if these persist. In surgery increased central depressant response (hypotension and increased sedative effect) can be controlled by (1) discontinuing at least two weeks prior; (2) in emergency surgery lowering dose of premedication; (3) when necessary, administering a vasopressor. Do not use in hyperactive and hyperexcitable patients. Pargyline may unmask severe psychotic symptoms where emotional problems pre-exist. Use cautiously in Parkinsonism, especially with antiparkinsonian agents. In prolonged therapy, examine for change in color perception, visual fields, fundi and visual acuity. Also, prolonged therapy has made certain patients refractory to nerve blocking effects of local anesthetics.

Methyclothiazide: Use cautiously in severe renal dysfunction, impaired hepatic function or progressive liver disease; also in pregnancy (bone marrow depression, thrombocytopenia, and altered carbohydrate metabolism have been reported in certain newborn). In surgery thiazide may reduce vasopressor response and increase tubocurarine response. Antihypertensive response may be enhanced following sympathectomy. Watch for electrolyte imbalance (e.g., hyponatremia). Give supplemental chloride if hypochloremic alkalosis occurs and supplemental potassium if hypokalemia occurs (especially in digitalized patients). Thiazides may decrease serum P.B.I. without signs of thyroid disturbance.

Adverse Reactions — Pargyline: Orthostatic hypotension and associated symptoms, mild constipation, fluid retention, edema, dry mouth, sweating, increased appetite, arthralgia, nausea, vomiting, headache, insomnia, difficult in micturition, nightmares, impotence, delayed ejaculation, rash, purpura, weight gain, hyperexcitability, increased neuromuscular activity and other extrapyramidal symptoms. Drug fever is extremely rare. Reduction in blood sugar and hypoglycemic effects are possible. Congestive heart failure has been reported in a few patients with reduced cardiac reserve.

Methyclothiazide: Blood dyscrasias (thrombocytopenia with purpura, agranulocytosis, aplastic anemia); elevation of BUN, blood sugar or serum uric acid (gout may be induced); anorexia, nausea, vomiting, diarrhea, headache, dizziness, paresthesia, weakness, skin rash, photosensitivity, jaundice and pancreatitis. Cutaneous vasculitis in elderly patients has been reported with other thiazides.

If side effects are severe or persist, reduce dosage or withdraw drug. 804438R

ABBOTT

TM-TRADEMARK

From the files of the

COMMITTEE FOR THE

STUDY OF MATERNAL MORTALITY

CASE 14-66. A 21 year old, married, white, primigravida who had been under the care of a private physician was admitted at term and in active labor at 2:15 A.M. on February 15, 1966. The membranes had ruptured spontaneously before admission. Uterine contractions were noted every five to seven minutes, each lasting 45 seconds. The blood pressure on admission was 130/70. The fetal heart beat was of good quality and counted at 132 per minute. At 3:45 A.M., the patient was given 100 mg Demerol and 100 mg Vistaril. The cervix was completely dilated at 5:20 A.M. and the patient was taken to the delivery room at 6:30 A.M. She received Trilene analgesia and was delivered spontaneously at 7:22 A.M. of a female infant weighing 7 pounds 5½ ounces. The infant breathed immediately and was in good condition. The placenta was delivered intact.

At 7:35 A.M. the patient was bleeding profusely. The cervix was checked and a laceration was found. A vaginal pack was inserted, and blood was sent to the laboratory for type and crossmatch for blood. Meanwhile, a general surgeon was called to repair the laceration. At 7:55 A.M. the patient's blood pressure was 88/60. She was given 35 mg Demerol and 1/150 gr Atropine as premedication. The uterus rose to two fingerbreadths above the umbilicus, and remained spongy until it was massaged. After whole blood had been started in cut downs in both legs, the patient was taken to the operating room to be examined. The vaginal packing was removed to permit exploration of the uterus, whereupon blood again poured from the uterus uncontrollably. An attempt was made to compress the fundus of the uterus by a hand on the abdomen. This compression resulted in temporary control of the hemorrhage, but when the hand was removed the hemorrhage again became profuse. An emergency hysterectomy was deemed necessary to control the bleeding adequately. The vagina was repacked with a laparotomy tape and an assistant maintained pressure on the fundus of the uterus while the patient was being prepared for operation.

A midline incision was hurriedly made to open the abdominal cavity. There was no free blood within the peritoneal cavity, nor was there any obvious perforation of the uterus. A conventional hysterectomy was performed. Throughout the operative procedure there was continued vaginal blood loss. Eight to 10 pints of blood were replaced. Rapid digitalization was induced on the operating table and intermittent support with vasopressor agents was provided. With hemostasis obtained and a correct sponge count the abdomen was closed in anatomic layers without drainage.

At the conclusion of the operation, the blood pressure was low and the pulse was rapid. The patient was cyanotic, and displayed grunting respirations. It was thought advisable to perform an emergency tracheotomy. The patient's color improved somewhat and her systolic blood pressure rose gradually to 80, but her pulse remained at 140. She received a total of 12 pints of blood, after which it was still necessary to administer Levophed to maintain a measurable blood pressure. The operative procedure was poorly tolerated and the patient's immediate postoperative condition was critical. Examination of the surgically removed uterus showed a laceration on the lateral wall that must have extended through the uterine vessels.

The patient survived for 24 hours following the operation but never regained total consciousness. Shortly following the operation the hematocrit suggested overtransfusion and accordingly a 1500 cc venoclysis was performed. Her hematocrit was 38% with a hemoglobin of 81%. The blood pressure still had to be maintained with Levophed solution.

The measured urinary output on February 15 was 620 cc; on the following day it was 675 cc. Solucortef and Decadron were administered together with oxygen via a tube inserted into the tracheotomy incision, but at 9:50 A.M. on February 16 no blood pressure was obtainable. External cardiac massage was successful in re-establishing a heart beat along with the use of the Bennett respirator, but this was successful for a short time only. A thoracotomy was performed, but she could not be resuscitated.

There was no autopsy. The cause of death was listed as pulmonary and cerebral edema following efforts to correct blood loss from laceration of the uterus of a term pregnancy.

Comments

This was classified as a direct obstetrical death with preventable factors on the part of the physicians. The committee felt the use of a uterine pack to try to control bleeding only hides the blood. Intravenous oxytocic infusion is usually more useful. It was also suggested that sponge forceps might have been used to clamp each side of the laceration for hemostasis until help could be obtained to repair the laceration if the physician attending the delivery was unable to do so himself.

Kentucky National Library Week will be observed April 21-27, according to Thomas A. Sutherland, Hartford, the Week's executive director. The National Library Week Program, sponsored since 1957 by the National Book Committee in cooperation with the American Library Association, was instituted as a means of seeking voluntary support from organizations and individuals for the libraries in their communities.

Karl Menninger, M.D., 74, a Chicago psychiatrist formerly of Topeka, Kansas, was appointed the first Distinguished Professor of Psychiatry for the University of Health Sciences/The Chicago Medical School January 25.



vacation in KENTUCKY PARKS

Where your dollars go farther

Department of Public Information,
Section PDB
Capital Annex, Frankfort, Kentucky 40601

Please send, without obligation, information on Kentucky's 40 state and national parks, the finest in the nation.

Name_____
Street Address_____
City_____
State_____ Zip Code_____

40 State and National Parks
The finest in the nation.



What can be done for Susan Jane To stop the runs and crampy pain?

Parepectolin for quick relief of acute diarrhea
...soothes colicky pain with paregoric
...consolidates fluid stools with pectin
...adsorbs irritants with kaolin, and protects intestinal mucosa.

In children, Parepectolin may be used to control diarrhea promptly and prevent dehydration, until etiology has been determined. In some cases, Parepectolin may be all the therapy necessary.

Parepectolin®

Each fluid ounce of creamy white suspension contains:
Paregoric (equivalent)..... (1.0 dram) 3.7 ml.
Contains opium (¼ grain) 15 mg. per fluid ounce.
warning: may be habit forming
Pectin ..... (2½ grains) 162 mg.
Kaolin (specially purified).... (85 grains) 5.5 Gm.
(alcohol 0.69%)
Usual Children's Dose: One or two teaspoonfuls three times daily.

RORER

WILLIAM H. RORER, INC.
Fort Washington, Pa.

Application

FOR SPACE IN THE SCIENTIFIC EXHIBIT SECTION

1968 Annual Meeting — Kentucky Medical Association

Convention Center — **Louisville, Kentucky** — **September 24, 25, 26**

Fill Out and Mail to:

T. R. MARSHALL, M.D., Chairman

Committee on Scientific Exhibits

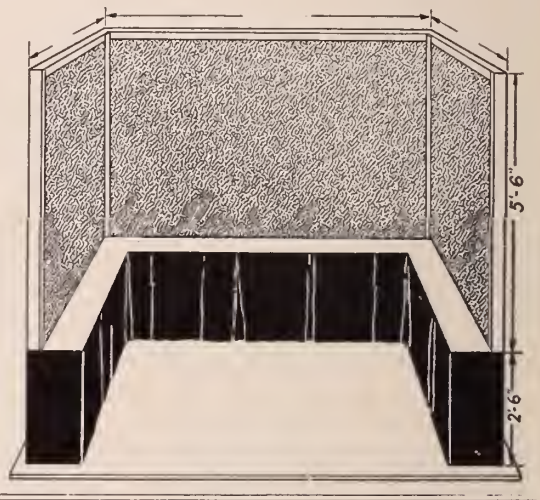
Kentucky Medical Association

3532 Janet Avenue

Louisville, Kentucky 40205

Applications for space should be received before July 1, 1968

Dimensions and structure of KMA Scientific booth are shown in accompanying illustration



1. Title of Exhibit: .....
2. Name (s) of Exhibitor (s): (AMA Member?) .....
   Institution (if desired): .....
   Mailing Address .....
3. Do you have a built-in exhibit? .....
4. Description of Exhibit: (Attach Brief Description Not To Exceed 50 Words to this blank)
5. Exhibit will consist of the following: (Check which)
   Charts and Posters.... Photographs.... Drawings.... X-rays....
   Specimens.... Moulages.... Other Material..... (Describe)
6. Booth Requirements:
   Amount of total wall space needed? .....
   Back wall ..... Side walls (All side walls are 4') .....
   Square feet needed? ..... Shelf desired? (yes or no) .....
7. Indicate sources of assistance provided in connection with the exhibit. .....
8. Has this exhibit been exhibited before? If so, when & where? .....

Date ....
Signature of Applicant

The Mead Johnson Aesculapius Award of $200.00 and identifying plaque will be presented by the KMA for the best exhibit in 1968.

The Kentucky Medical Association will provide without cost to the exhibitor the following: Exhibit space, shelves, sign for booth, current, bracket lights, provided all items are approved in advance by the committee.

Cost of transporting exhibits to the meeting must be borne by the individual exhibitor as well as costs of cards, signs, etc., which are a part of the exhibit.

View boxes, furniture, decorations, etc., may be rented, if desired, by applying directly to Jos. T. Griffin Company, 704 West Main Street, Louisville 2, who supply equipment for the annual KMA meeting.

Due to the shortage of space, please have your exhibit as compact as possible.



the spasm reactors your practice deserve

"the Donnatal® Effect"

	each tablet, capsule or 5 cc. of elixir (23% alcohol)	each Donnatal No. 2	each Extentab®
mine sulfate	0.1037 mg.	0.1037 mg.	0.3111 mg.
sulfate	0.0194 mg.	0.0194 mg.	0.0582 mg.
hydrobromide	0.0065 mg.	0.0065 mg.	0.0195 mg.
rbital	(¼ gr.) 16.2 mg.	(½ gr.) 32.4 mg.	(¾ gr.) 48.6 mg.
g: may be habit forming)			

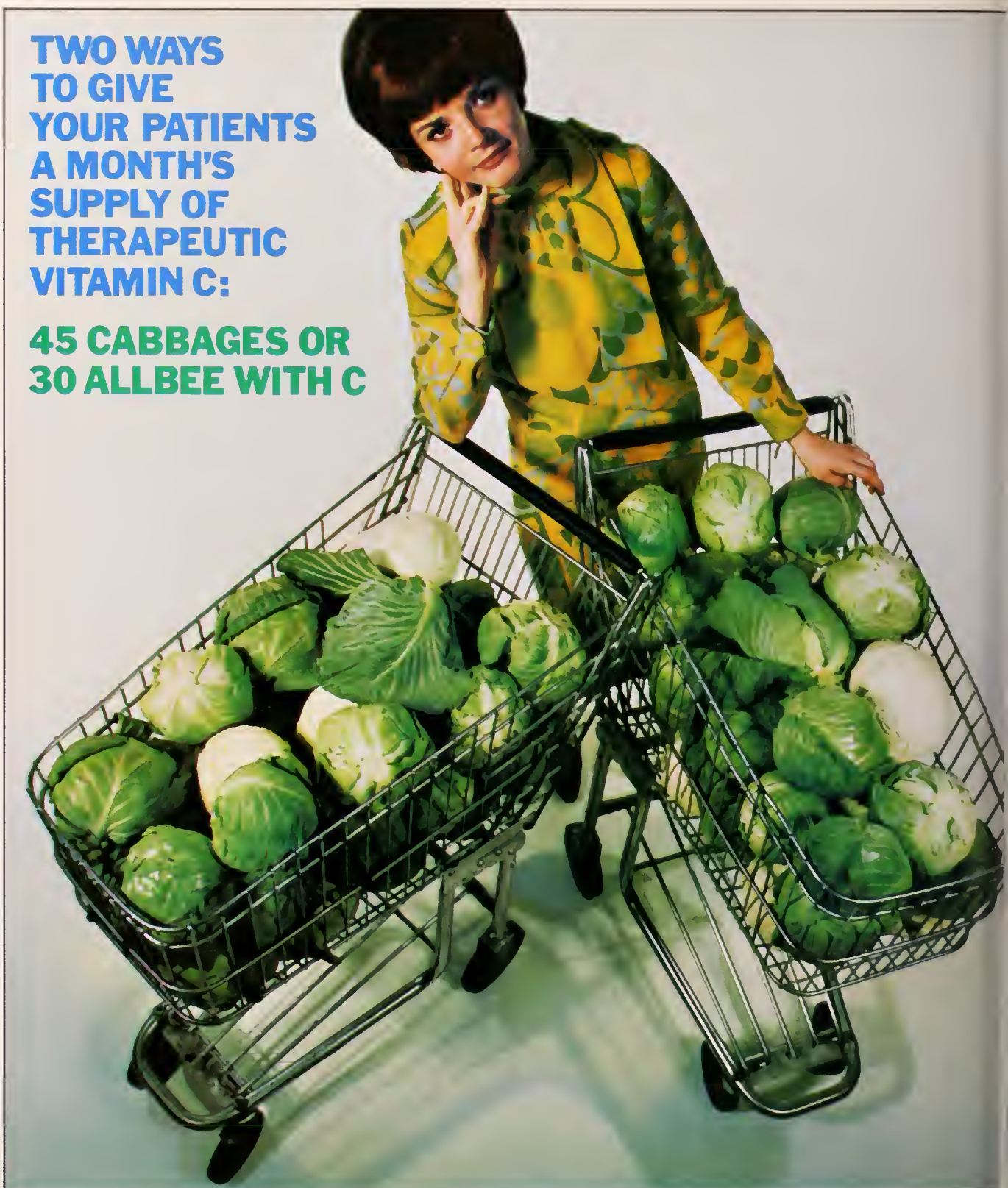
A. H. ROBINS COMPANY, RICHMOND, VIRGINIA 23220

Brief summary. Blurring of vision, dry mouth, difficult urination, and flushing or dryness of the skin may occur on higher dosage levels, rarely on usual dosage. Administer with caution to patients with incipient glaucoma or urinary bladder neck obstruction. Contraindicated in acute glaucoma, advanced renal or hepatic disease or a hypersensitivity to any of the ingredients.

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TWO WAYS TO GIVE YOUR PATIENTS A MONTH'S SUPPLY OF THERAPEUTIC VITAMIN C:

45 CABBAGES OR 30 ALLBEE WITH C



Your patient would have to eat 45 cabbages a month (1-1/2 a day) to get as much vitamin C as is contained in just one bottle of 30 Allbee with C capsules (taken one capsule daily). In addition, each capsule provides full therapeutic amounts of the B-complex vitamins. For example, as much niacin as 2 pounds of sirloin steak.

Write "30" for B and C deficiencies. This handy bottle of 30 Allbee with C capsules gives your patient a month's supply at a very reasonable cost. Also the economy size of 100. Available at pharmacies on your prescription or recommendation.

A. H. Robins Company, Richmond, Va. 23220.

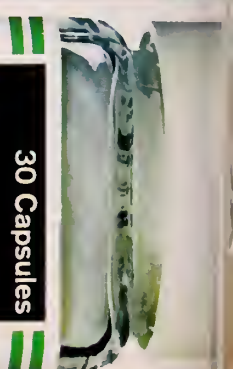


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30 Capsules
Allbee® with C

Each capsule Contains:

Thiamine mononitrate (Vit. B_1)	15 mg
Riboflavin (Vit. B_2)	10 mg
Pyridoxine hydrochloride (Vit. B_6)	5 mg
Niacinamide	50 mg
Calcium pantothenate	10 mg
Ascorbic acid (Vit. C)	300 mg



Don't let monilia cut broad-spectrum therapy short...

start with Tetrex-F®

tetracycline phosphate complex-nystatin

Use of broad-spectrum antibiotics can cause fungal overgrowth in the alimentary tract... and give rise to symptoms so troublesome that therapy must be prematurely stopped. Tetrex-F (tetracycline phosphate complex-nystatin) helps you circumvent this problem.

The nystatin can prevent overgrowth of monilia; the phosphate complex delivers tetracycline to the blood rapidly. Side effects are infrequent.

High-Risk Patients

Tetrex-F (tetracycline phosphate complex-nystatin) is especially useful in patients most susceptible to fungal overgrowth during tetracycline therapy: (1) the elderly or debilitated, (2) young children, (3) the diabetic, (4) those on long-term tetracycline therapy, (5) those on steroid therapy, (6) those who have had moniliasis before, and (7) pregnant patients with a history of monilial vaginitis.

When you start with economical Tetrex-F (tetracycline phosphate complex-nystatin), you can complete the full course of broad-spectrum therapy with less chance of losing control elsewhere. A good start for a healthy finish.

PRESCRIBING INFORMATION. For complete information consult Official Package Circular. *Indications:* Infections of respiratory, gastrointestinal and genitourinary tracts and skin and soft tissues due to tetracycline-sensitive organisms, in patients with increased susceptibility to monilial infections. *Contraindications:* The drug is contraindicated in patients hypersensitive to its components. *Warnings:* Photodynamic reactions have been produced by tetracyclines. Natural and artificial sunlight should be avoided during therapy. Stop treatment if skin discomfort occurs. With renal impairment, systemic accumulation and hepatotoxicity may occur. In this situation, lower doses should be used. Tooth staining and enamel hypoplasia may be induced during tooth development (last trimester of pregnancy, neonatal period and childhood). *Precautions:* Bacterial superinfections may occur. Infants may develop increased intracranial pressure with bulging fontanels. In gonorrheal therapy, serologic tests for syphilis should be conducted initially and monthly for 3 months. *Adverse Reactions:* Glossitis, stomatitis, nausea, diarrhea, flatulence, proctitis, vaginitis, dermatitis, and allergic reactions may occur. *Usual Adult Dosage:* 1 capsule q.i.d. Continue for 10 days in Beta-hemolytic streptococcal infections. Administer one hour before or two hours after meals. *Supplied:* Capsules, bottles of 16 and 100. Each capsule contains tetracycline phosphate complex equivalent to 250 mg. tetracycline HCl activity and 250,000 units of nystatin. For Oral Suspension, 125 mg. tetracycline and 125,000 u. nystatin/5 ml., 60 ml. bottles.

BRISTOL

BRISTOL LABORATORIES
Division of Bristol-Myers Company
Syracuse, New York 13201

Continuing Educational Opportunities

From The

KMA Postgraduate Medical Education Office

IN KENTUCKY

APRIL

17-18 KMA Interim Meeting, White House Inn (formerly The Lamplighter), Covington

18-20 Symposium on Selected Topics in Neurology and Neurosurgery (advanced); University of Kentucky College of Medicine, Lexington

23 Third KMA Trustee District Meeting, 6 p.m., Ivory Tower Inn, Hopkinsville

24-25 Kentucky Chapter, American Academy of Pediatrics, Annual Spring Meeting, Park Mammoth Resort, Park City

25 Fourth Post Graduate Rheumatic Disease Symposium, Rankin Amphitheater, General Hospital, Louisville

26 Kentucky chapter, American College of Radiology, Annual Spring Meeting, Imperial House, Lexington

26-27 Kentucky Ob-Gyn Society, Annual Spring Meeting, Stouffer's Inn, Louisville

MAY

8-10 Seventeenth Annual Scientific Assembly, Kentucky Academy of General Practice, Convention Center, Louisville

16 Kentucky Thoracic Society, Annual Meeting and Scientific Session, Stouffer's Inn, Louisville

17-18 Kentucky Surgical Society Annual Meeting, Park Mammoth Resort, Park City

18-19 Kentucky State Association of Medical Assistants Sixth Annual Convention, Campbell House Inn, Lexington

IN SURROUNDING STATES

APRIL

17-18 "Psychiatry and General Medicine," Cleveland Clinic Educational Foundation Postgraduate Course, Cleveland, Ohio

24 "Laboratory Aspects of Hematology," Cleveland Clinic Educational Foundation Postgraduate Course, Cleveland, Ohio

25-28 American Academy of Physical Medicine and Rehabilitation Annual Assembly, Sheraton-Chicago Hotel, Chicago, Ill.

MAY

13-17 Ohio State Medical Association Annual Meeting, Cincinnati-Exposition Center, Cincinnati, Ohio

19-20 Symposium on Dextrans, Texas Heart Association, Flagship Hotel, Galveston Island, Texas

JUNE

16 American College of Legal Medicine, Clinical Meeting, 2-5 p.m., San Francisco Hilton Hotel, San Francisco, Calif.

16-20 American Medical Association 117th Annual Convention, Brooks Hall, San Francisco, Calif.

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2. Bradley, J. E.: Mod. Med. *20*:71 (Oct. 15) 1952.
3. Crunden, A. B., Jr., and Davis, W. A.: Am. J. Obst. & Gynec. *65*:311 (Feb.) 1953.



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Cardiac Pacemakers

RICHARD D. RIEDEL* AND ALLAN M. LANSING, M.D.**

Louisville, Kentucky

Symptomatic heart block is best treated by cardiac pacing. The variety of units now available makes this applicable to almost any situation, regardless of the patient's age or general condition.

COMPLETE heart block is a fairly common acquired heart condition in adults. Medical treatment of this entity, which was not completely satisfactory, has recently been supplemented by direct electrical stimulation of the myocardium to increase the heart rate. Cardiac pacing by electrodes implanted in the heart is now available in most areas of the country, and with the improvements in pacemaker units and electrode wires, a rapidly increasing number of patients is being supported by cardiac pacing. Therefore, every physician must know the essential principles of cardiac pacing and recognize the indications for its application.

The average physician approaches this area with caution and may doubt that any lasting benefit can be obtained from a pacemaker. It is time to re-evaluate this attitude. Not only may death be postponed and disability alleviated in the great majority of patients, but most will be able to lead enjoyable and productive lives for many years.

Although Galvani[1] noted as early as 1791 that muscle was capable of responding to electrical stimulation, it was not until 1951 that a transvenous catheter was first employed by Callaghan and Bigelow to stimulate the atrium of the heart.[2] In 1952, Zoll et al. demonstrated that the ventricular rate could be speeded up by application of external electrodes applied to the chest wall.[3] Through the work of Furman and Schwedel in 1959, prolonged stimulation with a cardiac catheter and myocardial wire leads became possible.[4] The first implantable pulse generators containing adequate energy to stimulate the heart for several years were introduced by Chardack, Zoll, Kantrowitz and their co-workers between 1960 and 1962.[5-6-7] Synchronous pacemaking, in which the ventricular contraction is triggered by the P-wave of atrial activity, was described by Nathan et al. in 1963.[8] It may be assumed that in the next few years superior pacemakers will be developed that will be smaller, have fewer mechanical difficulties, and have a power source with an indefinite life span.

Types of Cardiac Pacemakers

There are two broad categories of pacemaker electrodes, external which are placed on the surface of the chest, and internal which are located within the chest cavity. Because of the resulting painful chest muscle contraction and skin irritation, the large size of the electrodes, and the need for line current as a source of power, external cardiac pacing is rarely used except in the emergency treatment of cardiac arrest. The electrodes of the internal cardiac pacemaker may be placed in contact with the myocardium by percutaneous needle, by an intravenous catheter passed into the

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right ventricle, or by thoracotomy. The power supply of the internal electrodes is usually portable, i.e., placed on the outside of the body or implanted somewhere within the body so that the patient can be ambulatory.

The clinical situation and the physician's experience determine the type of power unit and electrode to be employed. Percutaneous insertion of electrodes directly into the myocardium is seldom used today because of the difficulty in insertion and fixation and the frequency of infection. In general, an external portable pacemaker with a transvenous electrode is used first to stabilize the patient who will require permanent implantation and is all that is required when only temporary pacing is necessary, such as in the control of the heart rate when a permanent pacemaker fails, when temporary heart block complicates myocardial infarction, and during surgical implantation of a permanent pacemaker. In patients who cannot tolerate thoracotomy, a transvenous electrode and implantable power unit inserted under local anesthesia will be employed. (Figure 1)

Electrodes implanted on the surface of the heart by thoracotomy and an implantable power unit are utilized when the cardiac rhythm disturbance is not reversible and permanent transvenous pacing is unsuitable. (Figure 2) It is also required when synchronous pacing is desired, since a detector electrode to pick up the P-wave must be fixed to the surface of the left atrium and the stimulating electrodes to the ventricle. (Figure 3) Recent developments have made the synchronous transvenous pacemaker, which can be implanted under local anesthesia, a reality, but its reliability is not yet established.



FIGURE 1. Permanent transvenous pacemaker with electrode passed into the right ventricle through the external jugular vein and unit implanted in chest wall under local anesthesia.



FIGURE 2. Fixed rate pacemaker with ventricular electrodes implanted at thoracotomy.

Modes of Pacing

I. Fixed Rate (Asynchronous)

The most commonly employed type of pacing is the fixed-rate or asynchronous type, in which an impulse drives the ventricles at a constant rate, independent of the atrial rate. This method is indicated in complete A-V dissociation or sinus arrest where the ventricular rate is too slow to maintain adequate cerebral, cardiac, or renal function. Fixed-rate pacing may also be used to control multifocal ventricular premature contractions since a fast rate of stimulation by the pacemaker will suppress the ectopic activity. This type of pacing is less desirable if the above conditions alternate with normal sinus rhythm, since there will be competition between the pacemaker stimulus and the conducted impulses of the normal rhythm. Various studies have shown that when asynchronous pacing is employed, the optimal rate in most cases is 70 to 80 impulses per minute.

Some models of implantable fixed-rate pacemakers are available in which the rate can be varied by percutaneous insertion of a needle into the unit, by an external magnetic couple, or by radio frequency control. However, once a new rate has been established it is still fixed and asynchronous with the atrial rate.

II. Synchronous

Synchronous pacing is designated as "physiologic" because the atrial P-wave is utilized to time the impulse from the pacemaker. The atrial signal is detected, and after a delay slightly longer than the normal P-R interval, an impulse is sent out by the unit to stimulate the ventricles. Thus, the cardiac rate is varied with the changing needs of the body, since it increases and decreases simultaneously with changes in atrial activity. The commonly employed units have a built-in lower limit of 60-70 impulses per minute and an upper limit of 125-145. Above a level of 125 impulses per minute there is a 2:1 block which changes the driving rate to 60 impulses per minute. Should the atrial rate reach 190 impulses per minute, a 3:1 block again reduces the ventricular contraction rate to 60 beats per minute. Fixed rate pacing at 60 impulses per minute automatically occurs if the atrial rate is less than this or if the atrial pickup electrode fails. If normal conduction returns, the delay built in the pacemaker unit causes its impulse to fall in the absolute refractory period of the ventricle so that competition between the pacemaker and the normal stimulus does not occur.

Synchronous pacing is most commonly employed whenever complete heart block or sinus arrest alternates with normal sinus rhythm. When the patient's heart is in normal sinus rhythm, the pacemaker impulse will not have any effect. This type of pacing is also desirable in the young patient who would benefit from the ability to change his cardiac rate with activity.

Synchronous pacing is dangerous in a patient with an abnormal atrial rhythm. Although the electronic block of the unit limits the maximum response of the ventricle to 125-145 impulses per minute, atrial fibrillation will cause an erratic pattern of ventricular contraction, while atrial tachycardia or flutter may cause the ventricular rate to rapidly alternate between a rate of 125 and 60 impulses per minute. In either case, the cardiac output and the myocardial reserve may be seriously compromised.

III. Demand Pacing

In the demand pacemaker, a fixed rate of pacing is utilized but function of the unit is dependent upon the ventricular rhythm. The unit is usually set at a rate of about 60 impulses per minute, but is regulated so that a spontaneous ventricular rate faster than this will suppress the production of impulses by the pacemaker. Thus the unit functions only on "demand" when ventricular contractions occur at a rate below the predetermined value. One obvious theoretical advantage of this type of pacemaker is the extended battery life that should result from intermittent use of the unit.



FIGURE 3. Synchronous pacemaker implanted at thoracotomy. The unit is in the abdominal wall, an atrial pickup is attached to the left atrial appendage, and two stimulating electrodes are implanted in the myocardium of the left ventricle.

The activity of the demand pacemaker does not depend as much upon the total number of ventricular contractions per minute as it does upon whether a particular ventricular contraction occurs within a given period of time after the previous contraction. Thus the demand pacer will be inhibited by ectopic ventricular systoles. Therefore, demand pacing cannot be used in patients with frequent ectopic ventricular beats or those with normal sinus rhythm and episodes of ventricular arrhythmia, since runs of ventricular tachycardia or fibrillation will completely inhibit the activity of the pacer.

Demand pacing is therefore restricted to the patient with normal sinus rhythm and episodes of intermittent complete heart block or sinus arrest. It has certain theoretical advantages

over synchronous pacing such as longer battery life and independence of atrial arrhythmia.

Indications

The first question the physician must answer is whether the patient requires cardiac pacing. A careful history, thorough physical examination, and an electrocardiogram are usually sufficient for this purpose.

Most patients present with the classic indication of Stokes-Adams attacks and bradycardia that is proved to be AV dissociation by electrocardiogram. Other symptoms of cerebral arterial insufficiency include "falling out," dizziness, seizures, lethargy, and memory lapses. Poor renal perfusion causes azotemia, which is frequently present in chronic complete AV block. The patient with complete heart block may also have congestive heart failure that responds poorly to diuretics, while digitalis therapy is dangerous in the face of the slow ventricular rate.

Complete heart block may alternate with periods of normal sinus rhythm. If frequent Stokes-Adams attacks are proved to be caused by this mechanism, either a synchronous or a demand pacemaker may be implanted. The former will stimulate ventricular contraction whenever the conduction delay is greater than 0.16 seconds, while the latter will function whenever spontaneous ventricular activity is less than 60 beats per minute.

Temporary cardiac pacing may be indicated for other arrhythmias, such as the sinus arrest and slow ventricular rate caused by hyperkalemia. Ventricular arrhythmias such as asystole, tachycardia, or fibrillation may occur with complete heart block or be present with atrial flutter, atrial fibrillation, or normal sinus rhythm. In such cases, the temporary pacemaker should be set at a rate faster than the intrinsic ventricular rate to suppress its irritability. The same type of cardiac pacing may be needed when the multifocal ventricular activity results from digitalis intoxication. Myocardial infarction may also be complicated by transient complete heart block, and temporary cardiac pacing may greatly diminish the mortality rate in such patients by improving cardiac output, coronary perfusion and congestive failure.

Asymptomatic complete AV dissociation is usually not treated by cardiac pacing, particularly when the ventricular rate is more than 50 per minute, but when such a patient faces a stressful situation such as surgery, temporary transvenous pacing should be used.

Therapy

During Stokes-Adams seizures caused by complete heart block or associated tachycardia, fibrillation, or asystole, emergency measures are imperative. Although external pacing by electrodes on the chest wall may be the most useful method of resuscitation, the disadvantages of painful muscle contractions and local skin burns limit its use to short periods. Direct stimulation of the left ventricular myocardium by percutaneous insertion of the electrodes can also be used at this stage if the physician is familiar with the technique since the morbidity rate is low and it is very effective for short-term therapy. Some patients with complete heart block may respond to sympathomimetic amines such as isopropylnorepinephrine* with increased cardiac rate and output, but this therapy is contraindicated when the heart is very irritable. The ideal treatment is transvenous insertion of an electrode so that the heart can be paced by an external unit while the underlying disease process and cardiac arrhythmia are identified. Implantation of a permanent pacemaker is rarely necessary as an emergency procedure, now that temporary pacing is readily available.

After the emergency situation has been dealt with by control of the heart rate and production of an adequate cardiac output, diagnosis of the underlying pathologic state is undertaken. The cardiologist carefully reviews the history and the electrocardiogram to determine the type of arrhythmia, its cause, and the prognosis with medical measures versus permanent cardiac pacing.

If permanent pacing is required, the ultimate goal should be to implant all of the pacemaker within the patient's body. This avoids the problems of late infection, lessens the chance of accidental damage to the unit, and prevents the psychological trauma of wearing an external device. Completely implanted pacemakers are not free of problems, however, such as their inaccessibility for control and service and the surgical risk involved in their implantation, especially when thoracotomy is required. Local anesthesia and

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transvenous implantation of the stimulating electrode through the jugular vein into the right ventricle and the power unit under the skin or muscle of the chest wall is useful when thoracotomy is contraindicated. This method carries some risk of thrombosis and pulmonary embolism, perforation of the ventricle, and dislodgement of the catheter, but these problems have not been unduly troublesome with the newer units.

The variety of available lead systems, power sources, and modes of pacing permits control of almost all situations. Cardiac pacing should therefore be considered whenever it may be beneficial.

Complications

The electronic complexity of pacemakers and the different techniques that may be involved in their implantation give rise to various difficulties. External electrodes placed on the chest wall may fail to produce cardiac contraction, cause painful stimulation of the pectoral muscles, and produce local skin burns. There is also the possibility of leakage of electrical current from the ancillary equipment, which may cause a fatal arrhythmia such as ventricular fibrillation.

Internal pacemakers are plagued primarily by electrode fracture and premature battery failure. The electrode wires are subjected to repeated flexion strain and to electrolytic reactions at the anode site. Pure noble metal leads such as platinum or gold do not undergo electrolysis, but are very soft and break readily. Stainless steel electrodes are much stronger, but the degree of electrolysis is quite high. New alloys have been developed that are most resistant to flexion strain, but they still are subject to electrolysis when used as an anode, so a separate anode with a large surface area must be employed. Breakage due to flexion is also minimized by the use of coiled rather than straight electrode wires. Failure of pacing may also occur because of displacement of the electrode or an increase in stimulation threshold due to fibrosis at the implantation site. Finally, although the predicted functional life of the batteries may be three to five years, tissue fluid and ions slowly diffuse into the power unit, even though it has been encased in silicone and epoxy resin. The life span of the batteries is therefore less than would be expected, usually 18-30 months.

Other complications of implanted pacemakers include infection and the usual risks of surgery when a thoracotomy is required. With the transvenous electrodes, venous thrombosis, pulmonary embolism, displacement of the electrode with loss of pacemaker function, and perforation of the heart may occur. Despite this imposing list of possible complications, cardiac pacing is a well-established and extremely useful procedure since most of the complications can be corrected whereas the alternative to pacing is continued morbidity or death.

If the pacemaker fails, the patient's symptoms return and the cause must be immediately investigated and treated. A chest x-ray and electrocardiogram are obtained, and a temporary transvenous pacemaker is usually inserted to control the heart rate. The chest x-ray will frequently demonstrate a broken electrode or a shift in position of one of the electrodes. The electrocardiogram will determine the presence or absence of the pulse generator spike and its rate of propagation. If the spike is absent, an electrode wire is broken or the power unit has failed. If the spike is present, the cause of the failure can be determined in some units* by determination of the rate of discharge of the pacemaker. If the impulse rate has increased, an electrode wire is broken or fibrosis has occurred around the electrodes, while an impulse rate slower than when the unit was implanted indicates battery failure. However, each type of unit has its specific characteristics, and the problem should be referred to the cardiologist or surgeon who implanted the unit and is familiar with its function. He will detect the problem and take the necessary steps to correct it.

Clinical Experience

At the University of Louisville we have had a modest clinical experience with the management of patients with heart block. Cardiac pacemakers have been inserted in 34 patients, 31 adults ranging from 51 to 86 years of age, and three children five to six years old.** There have been 20 males and 14 females in this group. Complete heart block was present in 26 of the patients and a variable degree of heart block in eight. The duration of the heart block before insertion of some form of cardiac

* *Electrodyne models*

** *Up to September 30, 1967*

pacemaker varied from one day to 10 years with a mean time of 18 months and a median time of six weeks.

The etiology of the complete heart block was myocardial infarction in four patients, surgical trauma during repair of ventricular septal defect in three, and unknown in 19 of the 26 patients. The symptoms of the patients with complete heart block included Stokes-Adams attacks in 19, congestive heart failure in nine, uremia in six, and cardiac arrest, grand mal seizures, and lightheadedness in one case each. The etiology was unknown in the eight patients with a variable degree of heart block with alteration between normal sinus rhythm, sinus bradycardia, and first and second degree AV dissociation with sinus arrest. In all eight patients Stokes-Adams attacks occurred, while congestive heart failure was present in four and uremia in two.

Fixed rate pacemakers were inserted in 30 patients. The models used included 24 Electrodyne pacemakers, one Medtronic pacemaker, one Cordis unit, and four General Electric transvenous pacemakers. Synchronous pacemakers were inserted in four patients, two Cordis Atricor pacemakers and two Atricor Jr. units. The junior models were inserted in two children who had heart block following surgical repair of a ventricular septal defect, and the two adult synchronous pacemakers were inserted in patients with a variable degree of heart block complicated by Stokes-Adams attacks. One of these was a 70-year-old patient with a nine-month history and the other a 79-year-old patient with an eight-day history.

The pacemakers were inserted by thoracotomy in 26 patients, by the transvenous route in four patients, and by an abdominal approach through the diaphragm in four patients. This last technique was employed in very poor risk patients with severe lung disease before transvenous pacemakers became available. It was found to be very satisfactory since neither the abdominal nor the pleural cavity was entered. The electrodes were placed on the diaphragmatic surface of the right ventricle while the unit was placed in the abdominal wall.

Two patients died after operation, one at two days from myocardial infarction, and the other at six days from pulmonary embolus. Four of the 34 patients have died since implantation of the pacemaker, three from myocardial infarction and one suddenly from an unknown cause, possibly either dislodgement of a transvenous electrode or competition between the pacemaker and a normal sinus rhythm. The time of death after implantation was three months in one patient and two and one-half to four and one-half years in the other three. Therefore, the operative mortality was 6 percent, and if the patient survived the first month, he had an excellent chance of living at least two years.

Fifteen patients have remained completely free of symptoms for periods varying from two months to two years. In the other 19 patients failure of the pacemaker occurred one or more times at a period varying from two days to 19 months. In 15 instances this was caused by a broken electrode that had to be replaced, while battery failure accounted for the complication 15 times. With the newer electrodes, breakage has become much less of a problem, but battery failure still occurs at an earlier time than would be expected.

The follow-up care of a patient with an implanted pacemaker is extremely important. The patient should return to be checked one month after implantation and then at least every three months. He is also instructed to count his pulse daily for a full minute and should return for evaluation immediately if there is a variation of five or more beats per minute in the heart rate. Symptoms of dizziness or loss of consciousness should also lead to an immediate return to medical care.

At the present time the commonly employed units have about a 90 percent rate of function at one year and about 50 percent at two years. Continuous function for more than four years is quite unusual. Many efforts have been made to try to detect failure of the units before symptoms develop or complete heart block returns. One of the simplest is analysis of the electrocardiogram to determine the rate of pacemaker impulse formation, but unfortunately variations in the paper speed of the electrocardiogram make this somewhat less reliable than simple determination of the pulse on a calibrated oscilloscope to determine a variation in its rate of rise, and x-ray examination of the mercury cells to detect battery failure. In some units changes in the myocardial

threshold can be detected by external suppression of the impulse. Unfortunately, a reliable means of detecting failure of the unit before it occurs is not available, so some groups have recommended elective replacement of all units at a specified time after implantation, this time being determined by the past performance of that particular unit, and at present this varies from 24 to 30 months. It should be stated, however, that other groups routinely wait for signs of failure of the pacemaker before replacing it.

The post-operative care of the patient may also include the use of maintenance digitalis and diuretic therapy because of associated myocardial disease. This must be carried out extremely judiciously, however, because the heart rate itself cannot be used as an index of overdosage by digitalis, and premature ventricular contractions may be due to either inherent myocardial disease or digitalis toxicity. If multiple premature ventricular contractions occur in the absence of digitalis therapy, antiarrhythmic drugs should be used to suppress these and prevent competition between the pacemaker and the extrasystoles. In some units this effect can be achieved by increasing the rate of propagation of impulses by the pacemaker.

Conclusions

The patient with complete heart block should be considered for permanent cardiac pacing if he has symptoms such as Stokes-Adams attacks, congestive heart failure or extreme weakness. The variety of permanent pacemakers and electrodes presently available affords the physician reasonable reliability and versatility in selecting the best treatment of each individual case. The operative mortality for thoracotomy in the present series of 34 cases was only 6 percent despite the advanced age and poor general condition of many of the patients. After the first post-operative month, the life expectancy of the treated patient closely approximates that of the general population and he has a very good chance of living two or more years. Although half of the patients required treatment of mechanical failure in the first two years, this was only a temporary inconvenience to the patient, and the other half remained asymptomatic and free of mechanical troubles in this period.

Bibliography

1. Galvani, L.: De viribus electricitatis in mota musculari commentarius. *De Bononiensi Scientarium et Artum Instituto Atque Academia Commentary*. 7:363, 1791.
2. Callaghan, J. C., and Bigelow, W. G.: An electrical artificial pacemaker for standstill of the heart. *Ann. Surg.* 138:8, 1951.
3. Zoll, P. M.: Resuscitation of the heart in ventricular standstill by external electrical stimulation. *New England J. Med.* 247:768, 1952.
4. Furman, S., and Schwedel, J. B.: An intracardiac pacemaker for Stokes-Adams seizures. *New England J. Med.* 261: 943, 1959.
5. Chardack, W. M., Gage, A. A, and Greatbatch, W.: A transistorized self-contained, implantable pacemaker for the long-term correction of complete heart block. *Surgery* 48:643, 1960.
6. Zoll, P. M., Frank, H. A., Zarsky, L. R. N., Linenthal, A. J. and Belgard, A. H.: Long-term electric stimulation of the heart for Stokes-Adams disease. *Ann. Surg.* 154:330, 1961.
7. Kantrowitz, A., Cohen, R., Raillard, H., Schmidt, J. and Feldman, D. S.: The treatment of complete heart block with an implanted controllable pacemaker. *Surg. Gynec. & Obst.* 115:415, 1962.
8. Nathan, D. A., Center, S., Wu, C. Y., and Keller, W.: An implantable synchronous pacemaker for the long-term correction of complete heart block. *Circulation* 27: 682, 1963.

A Survey of Current Anesthetic Practice in Kentucky†

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The advancement of anesthesia in Kentucky has been notable. An evaluation of our present day situation is imperative in order that we might plan for future improvement.

FOLLOWING the decisions of John W. Heim, M.D. and W. Hamilton Long, M.D., Louisville, in the first decade of the twentieth century, to limit their practice to anesthesia, the quality of anesthesia in Kentucky began slowly to improve. It is evident that anesthesia has improved tremendously since then, particularly in the last 20 years. In order that we might have a clear picture of our present day practice, a survey of the practice of anesthesia in Kentucky has been made.

Method

A survey questionnaire with a letter of explanation was mailed to the administrators of all hospitals belonging to the Kentucky Hospital Association. For the sake of anonymity, no signatures or names of hospitals were requested. It was felt that by this means more questionnaires would be returned and their accuracy would be greater. The questionnaire sought answers to the following:

Are anesthetics administered in your hospital? Yes— No—

Does an MD administer anesthesia in your hospital? Yes— No.— If yes, the number——

Is a physician other than the surgeon in attendance during surgical anesthesia? Yes— No— Obstetrical anesthesia? Yes— No—

Approximate number of surgical anesthetics per year? ——

Approximate number of obstetrical anesthetics per year? ——

Surgical anesthesia is given by MD— RN— Dentist— Lay—

Obstetrical anesthesia is given by Obstetrician— Other MD— RN— Dentist— Lay

The institutions teaching anesthesia in the state were contacted and their programs were discussed. They are: the department of anesthesia, University of Kentucky College of Medicine; department of anesthesia, University of Louisville School of Medicine; and the Appalachian Regional Hospital School for Nurse Anesthetists, Harlan. The president of the Kentucky Society of Nurse Anesthetists was contacted and a discussion of their membership ensued. The membership of the Kentucky Society of Anesthesiologists as listed in the *American Society of Anesthesiologists 1967 Directory* was studied.[1]

Results

Of the 133 questionnaires mailed, 98, or approximately 74 percent were returned. This response was truly gratifying.

Nine questionnaires of the 98 returned indicated that anesthesia was not administered in their respective institutions. One pointed out, however, that it was a psychiatric hospital and that anesthesia was given for shock therapy but not for surgical or obstetrical procedures. Another indicated that only topical anesthesia was administered in the hospital. Consequently, the results of this survey will be gathered from the information obtained from 89 hospitals.

Physicians administered anesthesia in 65 hospitals. They practiced either on a full time or part time basis, by themselves or in association with other doctors, nurses and dentists.

†Presented before the Kentucky Society of Anesthesiologists Session during the Annual Meeting of the Kentucky Medical Association, September 26, 1967
**Anesthesiologist practicing in Louisville*

Twenty-three hospitals had no physician-administered anesthesia; one did not answer this question.

NUMBER OF HOSPITALS		
Yes	60	67.4%
No	26	29.2%
No Answer	3	3.4%

FIGURE 1. Hospital Response to the Question "Is a Physician, Other Than the Surgeon, in Attendance During Surgical Anesthesia?"

The question, "Is a physician, other than the surgeon, in attendance during surgical anesthesia?" was probably misleading. Eighty-one hospitals replied "yes" to this question but 20 indicated that the surgical anesthesia was given by a nurse anesthetist, and one hospital used a dentist. I think that these administrators felt if the surgeon's assistant was a physician, that a physician other than the surgeon was in attendance, even though this physician was not giving the anesthesia. By excluding these 21 hospitals, a total of 60 remain in which a physician other than the surgeon probably administers surgical anesthesia. Twenty-six hospitals answered "No" to this question and three gave no answer. (Figure 1)

NUMBER OF HOSPITALS		
Nurse	58	76.3%
Physician	15	19.7%
No Answer	3	4.0%

FIGURE 2. Hospital Response to the Question "Is a Physician, Other Than the Obstetrician, in Attendance During Obstetrical Anesthesia?"

Only 15 of the 76 hospitals in which obstetrics is practiced indicated that a physician other than the obstetrician was present during obstetrical anesthesia. No physician other than the obstetrician was present in 58 hospitals and three did not answer. (Figure 2)

Six hospitals in which surgical anesthesia was given did not record the approximate number. In another, the figure was obviously incorrect. In the remaining 82 hospitals approximately 93,105 surgical anesthetics were given.

Of the 76 hospitals which had an obstetrical service four did not record the approximate number of obstetrical anesthetics. In the remaining 72 hospitals approximately 33,458 obstetrical anesthetics were given.

NUMBER OF SURGICAL PROCEDURES		
M.D.	53731	57.6 %
M.D.-R.N.	24102	26.0 %
R.N.	13077	14.04%
M.D.-R.N.-Dentist	1800	1.94%
Dentist	320	0.34%
M.D.-Dentist	75	0.08%
Lay	0	0%

FIGURE 3. Various Combinations of Personnel Administering Surgical Anesthesia.

An amazing assortment represents those giving anesthesia for both surgical and obstetrical cases. (See Figures 3 and 4)

NUMBER OF OBSTETRICAL PROCEDURES		
R.N.	11978	35.8 %
* Other M.D.	9339	28.0 %
Other M.D.-Obstetrician	3865	11.6 %
Other M.D.-R.N.-Obstetrician	2460	7.3 %
Other M.D.-R.N.	2079	6.2 %
Obstetrician-R.N.	1375	4.1 %
Obstetrician	1374	4.1 %
Other M.D.-R.N.-Dentist	800	2.35%
Other M.D.-Lay-Obstetrician-R.N.	110	0.32%
Lay	78	0.23%

FIGURE 4. Various Combinations of Personnel Administering Obstetrical Anesthesia.

* Any physician other than the obstetrician who gave the anesthesia

The number of Certified Registered Nurse Anesthetists in the Kentucky Society of Nurse Anesthetists is 115. Of this number, 15 are inactive. The number of physicians belonging to the Kentucky Society of Anesthesiologists is 89.

There are two resident-training programs in anesthesiology, one at the University of Louisville, the other at the University of Kentucky. Each has an approved program for eight residents. At the present time 13 of these 16 positions are filled.

Only one school for nurse anesthetists is found in the state and is located at the Harlan Appalachian Regional Hospital. Its capacity is four and is usually filled.

In the 1967 Directory of the American Society of Anesthesiologists it was found that there are in Kentucky 41 Diplomates of the American Board of Anesthesiology. There are 29 Fellows of the American College of Anesthesiology; 23 physicians are members of both. Thus, a total of 47 physicians belong to

either the American Board of Anesthesiology or the American College of Anesthesiology. This represents 52.8 percent of the members of the Kentucky Society of Anesthesiology.

Discussion

Physician anesthesia is well represented in the surgical field. It is in the field of obstetrical anesthesia that physician coverage is poor. It should be noted that the nurse anesthetists are solely responsible for more than one-third of the obstetrical anesthetics given. In another one-fifth of the obstetrical procedures, they work in various combinations with physicians, obstetricians and dentists.

Obstetrical coverage on the whole leaves much to be desired throughout the state, except in the larger populated areas. Something is amiss when the obstetrical service of a hospital must depend on lay personnel to give obstetrical anesthesia. (See Figure 4) A hospital administrator added this comment, "O.B. anesthesia, 24-hour coverage, a constant 'thorn'."

Our medical schools, with their excellent resident-training and teaching programs for medical students, are responsible in part for the increase in the number of anesthesiologists in the state. General practitioners who are attracted to our specialty are encouraged to seek further training. Some train for a three-month period, others on a part time basis. They may come to the training center several times a week for a year or a year and a half. It is their goal to qualify as a Fellow in the American College of Anesthesiologists.

One school has a team of anesthesiologists who go directly to the hospital where either the physician or nurse administers anesthesia and offers 'on the job training'. This program has been used more frequently by the nurse anesthetists. The teaching team usually goes one day a week for six consecutive weeks.

Since the school for nurse anesthetists opened in 1956, some 19 students have graduated. It is to the school's credit that all have passed their qualifying examinations. The school attempts, insofar as possible, to accept applicants who have lived in the Appalachian area, with the hope that they will remain there when their training is completed. Six are still working in the region and another six have worked for varying periods of time. Male applicants outnumber the female applicants considerably.

Another error in my questionnaire occurred when I neglected to differentiate between an R.N. given anesthetic and one given by a C.R.N.A. Twelve of the cards were changed to read 'C.R.N.A.' instead of 'R.N.'. One card included the following note, "I think it would have been more interesting to have known whether 'R.N.' or 'C.R.N.A.' Same difference as 'granny mid-wife' or 'obstetrician'."

It is our smaller hospitals that suffer from the lack of trained anesthetists and anesthesiologists. The inability of these hospitals to attract better people, I feel, is due to the fact that the total number of surgical and obstetrical cases done yearly in these institutions is not large enough to compensate adequately those who might give anesthesia there. To illustrate this point, the approximate number of anesthetics given per year in some of our smaller hospitals ranges from 10 to 100 surgical anesthetics and from six to 98 obstetrical anesthetics. As the size of the hospital increases, there is usually an increase in the quality of anesthesia.

Summary

A survey of the current practice of anesthesia in Kentucky has been made. The various types of anesthesia coverage in the responding hospitals have been presented. The efforts of our teaching institutions in training anesthesiologists and nurse anesthetists have been discussed.

Anesthesia in Kentucky has improved both in quality and quantity since the advent of the twentieth century. Many problems are still present, but anesthesia will continue to improve because many physicians and nurses in the state are interested in improving their skills and attracting new members to anesthesia.

References

1. *Directory of Members, The American Society of Anesthesiologists,* Thirty-second Edition, January, 1967.

Immune Globulin G (IgG) in Amniotic Fluid from Rh-Isoimmunized Pregnancies with Severely Affected Infants

A Preliminary Report†

B. F. Andrews, M.D.,* W. M. Wolfe, Jr., M.D.**
J. H. Hoffman, M.D.,*** and P. Kalayil, B.S.
Louisville, Kentucky

Six of 23 pregnancies with anti-D titers had amniotic fluid △ O.D. over 0.2 Three resulted in stillbirth and three hydrops. Immunodiffusion studies revealed IgG bands only in the six severely affected infants.

THE application of spectophotometry to the study of amniotic fluid from normal and Rh sensitized pregnancies by Bevis[1] has led to an increased interest of this immediate compartment to the newborn for normal and pathological states. The optical density peak at 450 mμ as proposed by Liley[2] has afforded excellent prognostic value in the hands of many investigators when applied prior to the 35th week of gestation[3-5]. The use of this method for selection of time of delivery has reduced the stillborn and neonatal death rates from erythroblastosis from up to 30 per cent down to 10 per cent[6]. Intraperitoneal transfusions for infants of earlier gestational ages have further reduced mortality[3-5].

Recently conflicting reports regarding total proteins and protein electrophoretic patterns from amniotic fluid of sensitized mothers became available[7-12]. Mentasti[7] reported elevated globulins in two severly affected infants. It is generally found that total amniotic fluid protein falls as pregnancy reaches term[6-9]. Little information on immunodiffusion studies of amniotic fluid is available, especially in regard to erythroblastosis fetalis[13].

The purpose of this brief article is to report the presence of immune globulin G (IgG) in the amniotic fluid of severely affected Rh sensitized pregnancies (anti-D titers)[14] and to encourage other investigators to initiate similar studies.

Material and Methods

Twenty-three mothers with anti-D titers had one to four amniocenteses for evaluation of severity of hemolytic disease. Optical density at 450 mμ were determined according to the method of Liley[2]. Immunoelectrophoreses were performed on the first unconcentrated amniotic fluid on an LKB immunophor apparatus with a Veronal Barbital buffer at pH 8.6 with anti-human serum, -IgA, -IgM, and IgG from Highland Laboratories and anti-human Rh immune globulin provided by Ortho Laboratories.

Results

Six of 23 mothers had amniotic fluid △ 450 mμ peaks greater than 0.2. Three of six had stillbirths before the 36th week; one nine days following intrauterine transfusion. The remaining three were born with hydrops prior to 36 weeks gestation, and expired.

Ten mothers had amniocentesis values in Liley's Zone II. All infants were Coombs positive. Eight required early exchange transfusion by currently accepted criteria. One was exchanged on the fifth day because of hyperbilirubinemia without severe anemia.

†*From the departments of pediatrics and obstetrics and gynecology, University of Louisville School of Medicine; supported by General Research Support Grant (FR5357); presented in part at the Southern Society for Pediatric Research, Norman, Okla., November 11-12, 1966.*

**Associate professor of pediatrics, director of Newborn Services*
***Assistant professor of obstetrics and gynecology*
****Resident in obstetrics and gynecology*

Of seven mothers with amniocentesis values in Liley's Zone I, only one was Coombs positive, but did not exhibit hyperbilirubinemia or anemia. Two mothers had anti-D (indirect Coombs) titers of over 1:300 to 1:2000, but delivered Coombs negative infants.

Immunodiffusion studies revealed dense immune globulin G only in amniotic specimens with △ 450 mμ peaks of 0.2 or greater. Two bloody specimens in Zone II and one in Zone I exhibited faint traces of IgG. Figure I reveals the immunodiffusion patterns of amniotic fluid and anti-human serum as follows: A shows dense albumin bands on the left and IgG bands far right for stillborns; B shows less intense IgG bands for hydrops; C shows only traces of IgG from bloody specimens; D shows no IgG from two sensitized pregnancies. Further studies of the first amniocentesis specimen from each subject with anti-IgM, -IgA and anti-Rh immune sera revealed no bands.

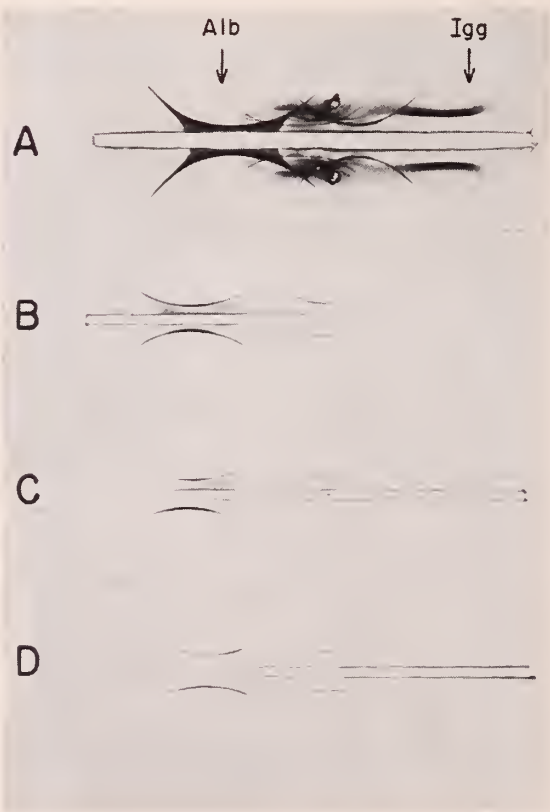


FIGURE 1. Immunodiffusion studies of amniotic fluid with anti-normal human serum are shown: (a) Amniotic fluid from stillborns, (b) from hydrops fetalis, (c) from traumatic amniocentesis from sensitized pregnancies, (d) fluid from sensitized pregnancies. Arrows indicate albumin and immune globulin G (IgG).

Discussion

This study adds further confirmation of the significance of amniotic fluid spectrophotometry in management of Rh sensitized pregnancies[1-6]. The eventual outcome of infants with △ O.D. 450 mμ peaks over 0.2 and the need for intrauterine transfusion or immediate delivery depending upon gestational age were demonstrated[2-6].

Mentasti[7] in 1959 reported an increase in gamma globulin after the sixth month of pregnancy and reported elevated total protein in two subjects with hemolytic disease. Abbas and Tovey[8] in 1960 found increases of gamma globulin in one case of hydrops fetalis. Strebel[13] in 1960 demonstrated the presence of up to 16 antigenically different proteins in amniotic fluid obtained from 10 weeks to term. The present report is the first to demonstrate the presence of IgG in unconcentrated amniotic fluid of severely affected infants with hemolytic disease. Only faint traces of IgG were detected in three bloody specimens. The appearance of IgG in non-bloody specimens would indicate severe disease and may indicate along with spectrophotometric values immediate intrauterine transfusion or delivery of the affected infant. Also the observation could mean onset of hydrops *and* an early gestational age would contraindicate intrauterine transfusion. Our single intrauterine transfusion resulted in stillbirth approximately one week following the procedure. Further studies for gestational age, quantitation of immune globulins and comparison with protein electrophesis of amniotic fluid are currently underway. We urge other investigators to initiate similar studies to determine whether presence of IgG always indicates severe disease or indicates onset of hydrops.

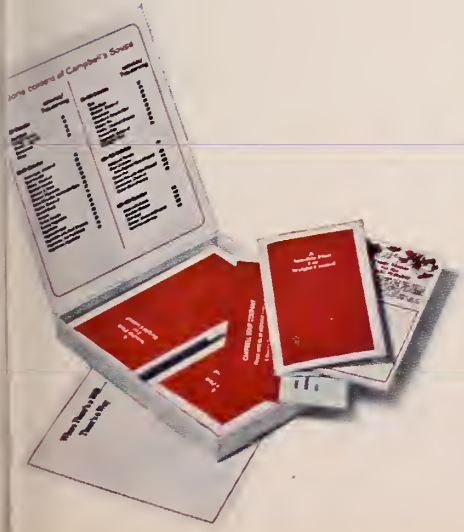
Summary

Six of 23 pregnancies with anti-D titers had amniotic fluid △ O.D. 450 mμ peaks over 0.2. Three resulted in stillbirth and three hydrops fetalis. Immunodiffusion studies with anti-human serum, -IgA, -IgM, -IgG and -Rh immune globulin revealed dense IgG bands only in the six severely affected infants. The presence of IgG in non-bloody amniotic fluid specimens may indicate onset of severe disease or hydrops and may be used along with spectrophotometry as an indication for immediate intrauterine transfusion or delivery, or

(Continued on Page 404)



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(1) Bilbao, M. K.; Frische, L. H.; Rösch, J., and Dotter, C. T.: Hypotonic Duodenography, Scientific Exhibit, Radiological Society of North America, Chicago, Nov. 27–Dec. 2, 1966.

(2) Bilbao, M. K.; Frische, L. H.; Dotter, C. T., and Rösch, J.: Hypotonic Duodenography, Radiology *89*:438-443 (Sept.) 1967.

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Significance of Protein and Bilirubin-protein Ratio In Amniotic Fluid from Rh-Isoimmunized Mothers

A Preliminary Report†

B. F. Andrews, M.D.,* W. M. Wolfe, Jr., M.D.,**
J. H. Hoffman, M.D.,*** and P.P. Thomas, B.S.M.T. (ASCP)
Louisville, Kentucky

Amniotic fluid from 23 subjects with anti-D titers was studied by the method of Liley and also for total proteins. Total protein values alone were not reliable. The ratio △ O.D. 450 mu to total protein was demonstrated to afford the best prognostic significance irrespective of gestational age.

Bevis[1] in 1956 introduced spectrophotometric scanning of amniotic fluid from Rh-isoimmunized pregnancies and suggested the major optical density (O.D.) peak represented bilirubin. Later Liley[2] selected the specific O.D. at 450 mμ which has been shown universally to afford accurate prognosis for outcome of Rh-isoimmunized pregnancies when gestational age is known and is under 35 weeks.[3-6] Recently Brazie and associates[7] have determined the major pigment is indirect bilirubin. Errors in spectrophotometric scanning became known[8] and other investigators introduced the total protein determination of amniotic fluid as a measure of decreasing errors.[9-12] Several investigators reported elevated amniotic fluid protein in severe hemolytic disease[9-11] while others could not substantiate this observation.[12] Studies of normal amniotic fluid revealed decreasing protein values as term approaches.[13] Cherry and associates[14] found total protein of amniotic fluid to be related to severity of erythroblastosis and further stated that the O.D. (450-600) mμ to total protein in Gm/100 ml. ratio eliminates the problem of dilution of amniotic fluid near term and permits an estimate from a single specimen without knowledge of the exact gestational age.

Since the use of spectrophotometry alone enables selective time of delivery or intrauterine transfusion of 95 per cent of affected infants prior to 35 weeks gestation when gestation is known, any method which eliminates errors in prognosis due to gestational age or hydramnios would be of great importance. The current study was undertaken to evaluate total protein concentration and the △ O.D. 450 mμ-protein ratio for their prognostic value in determining outcome of Rh-isoimmunized pregnancies.

Material and Methods

Twenty-three mothers with anti-D titers had from one to four amniocenteses. Liley's method[2] for determining △ O.D. 450 mμ and a microbiuret method[15] for total protein concentration were used on the first amniotic fluid specimen obtained. The following ratio was determined: $\frac{\triangle \text{ O.D. } 450 \text{ m}\mu}{\text{Total protein Gm/100 ml}}$. Three bloody amniotic fluids were not studied for protein. Outcome of the infants was divided into three categories:

I. Stillbirths and hydrops
II. Moderate, requiring exchange transfusions
III. Mild or not involved

Results

Total protein concentrations are plotted according to gestational age in relation to the

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***Assistant professor of obstetrics and gynecology*
****Resident in obstetrics and gynecology*

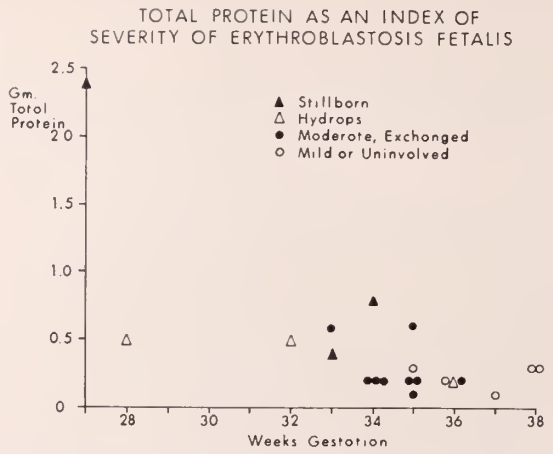


FIGURE 1. Total protein concentration of 20 amniotic fluid specimens from Rh-sensitized mothers is compared to gestational age and outcome of their infants.

severity of hemolytic disease in the infants in Figure I. Infants in category I had values ranging from 0.2 to 2.4 with a mean of 0.8 Gm per cent. Infants requiring exchange transfusion from category II had a range of 0.1 to 0.6 with a mean of 0.24 Gm per cent. In the mild, or nonaffected group III, values ranged from 0.1 to 0.3 with a mean of 0.24 Gm per cent. Values over 0.4 Gm per cent were always associated with infants requiring exchange transfusions by currently accepted criteria. However, infants with hydrops and moderately severe disease had values less than the mild or nonaffected infants. The highest values were observed in stillborns. It is possible that the value 2.4 Gm was for ascitic fluid.

Figure 2 depicts ratios of the △ O.D. 450 mμ to total protein according to gestational age in relation to outcome of the infants. Ratios under 0.12 were not associated with affected infants. Ratios for infants requiring exchange transfusion, category II, were 0.12 to 0.6 with a mean of 0.34. The most severe, with hydrops or stillbirth, category I, ranged from 0.36 to 0.83 with a mean of 0.52. Two stillbirths and two of three hydrops had ratios over 0.45. No fall in values occurred with increase in gestational age.

Comments

Our data regarding concentration of protein was not in complete agreement with other investigators who reported excellent prognostic significance of protein concentration in amniotic fluid of Rh-isoimmunized pregnancies.[9-11,14] However, our values were compatible with those of Walker and associates[12] and were high for severely affected infants. The mean concentrations of protein for our uninvolved infants and infants requiring exchange transfusions without hydrops were identical at 0.24 Gm/ 100 ml. Infants with hydrops or stillbirth had values from 0.2 to 2.4 with a mean of 0.86 Gm/100 ml. Mentasti,[16] and Abbas and Tovey,[9] using protein electrophoresis, and Andrews and associates[17] using immunodiffusion techniques reported increased gamma globulin and albumin in severely affected infants. In normal pregnancy dilution of amniotic fluid occurs and total protein decreases toward term, paralleling the fall in bilirubin pigments.[13]

The results of the current study would indicate that correct prognosis or outcome of Rh-isoimmunized pregnancies can best be determined by the ratio △ O.D. 450 mμ.

$$\frac{\text{Total Protein Gm/100 ml}}{}$$

Values were not dependent upon gestational age. Ratios of less than 0.12 were found in uninvolved infants. For infants requiring one to two exchange transfusions ratios ranged from 0.12 to 0.6 with a mean of .34; while two stillbirths, two hydrops, and only one infant who required two exchange transfusions had values over 0.45. Therefore, correct prognosis was given without knowledge of hydramnios or gestational age. No meconium stained specimens were studied; therefore, no statement can be made regarding errors induced by its appearance. The △ O.D. 450 mμ values from three bloody specimens gave a correct prognosis. Although Cherry and associates[14] used △ O.D. (450 minus 600) mμ, they came to similar conclusions. Since the △ O.D.

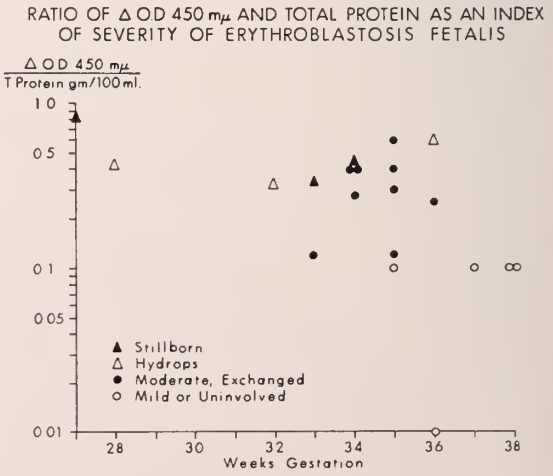


FIGURE 2. The △ 450 mu to total protein in Gms per cent ratios of 20 amniotic fluid specimens are compared to gestational age and outcome of the infants.

450 mμ of Liley is now being accepted as indirect bilirubin, we would urge its use because of familiarity in calculating the ratio.

Summary

Liley's work was confirmed by spectrophotometric scanning in 23 subjects. The value of the ratio of △ O.D. 450 mμ to total protein in Gm per cent of amniotic fluid from Rh-isoimmunized mothers was demonstrated to afford the best prognostic value irrespective of gestational age. Total protein fell with gestational age and was not a reliable indication of presence of hemolytic disease except in severe cases. The use of the bilirubin to protein ratio is suggested, especially when gestation is unknown, is late, or when hydramnios is present.

Addendum

Further studies in over 50 subjects have shown lack of correlation of severity of disease with total protein, but have substantiated the value of the $\frac{\triangle O.D.\ 450\ m\mu}{\text{Total Protein}}$ in predicting outcome.

We thank A. W. Liley, M.D. for confirmatory studies on first specimens; and our obstetrical colleagues in the Greater Louisville area for their cooperation and provision of specimens.

References

1. Bevis, D.C.A.: Blood pigments in haemolytic disease of the newborn, *J. Obst. and Gynaec. Brit. Comm.*, 63: 68, 1956.
2. Liley, A. W: Liquor amnii analysis in management of pregnancy complicated by rhesus sensitization, *Am. J. Obst. and Gynec.*, 82:1359, 1961.
3. Robertson, J. G.: Examnation of amniotic fluid in rhesus isoimmunization, *Brit. Med. J.*, 2: 147, 1964.
4. Cherry, S. H..; Amniotic fluid analysis in antepartum management of Rh hemolytic disease, *New York J. Med.*, 65: 1226, 1965.
5. Bowman, J. M., and Pollack, J. M.: Amniotic fluid spectrophotometry and early delivery in the management of erythroblastosis fetalis, *Pediat.*, 35:815, 1965.
6. Freda, V. J.: The Rh problem in obstetrics and a new concept of its management using amniocentesis and spectrophotometric scanning of amniotic fluid, *Am. J. Obst. and Gynec.*, 92: 341, 1965.
7. Brazie, J. V., Ibbott, F. A.; and Bowes, W. A., Jr., Identification of the pigment in amniotic fluid of erythroblastosis as bilirubin, J. *Pediat.*, 69:354, 1966.
8. Liley, A. W.: Errors in the assessment of haemolytic disease from amniotic fluid, *Am. J. Obst. and Gynec.*, 86:485, 1963.
9. Abbas, T. M., and Tovey, J. E.: Proteins of the liquor amnio; *Brit. Med. J.*, 1:476, 1960.
10. Wild, A. E.: The association between protein and bilirubin in liquor amnii, *Clin. Sci.*, 21:221, 1961.
11. Stander, R. W., McNutt, C. C., Barton, D. M. and Wertz, C. E.: Characterization of proteins of human amniotic fluid by means of paper electrophoresis, *Am. J. Clin. Path.*, 42: 125, 1964.
12. Walker, W., Fairweather, D.V.I.; and Jones, P.: Examination of liquor amnii as a method of predicting severity of haemolytic disease of newborn, *Brit. Med. J.* 2:141, 1964.
13. Makepeace, A. W., Fremont-Smith, F., Dailey, M. E., and Carroll, M. P.: The nature of amniotic fluid, *Surg. Gynec. and Obst.* 53:635, 1931.
14. Cherry, S. H., Kochwa, S., and Rosefeld, R. E.: Bilirubin-protein ratio in amniotic fluid as an index of the severity of erythroblastosis fetalis, *Obst. and Gynec.* 26:826, 1965.
15. Meites, S., and Faulkner, W. R.: *Manual of Practical Micro and General Procedures in Clinical Chemistry*, Thomas, Springfield, p. 94, 1962.
16. Mentasti, P.: Il protidogramma del liquido amniotico. Volutazione con microelettroforeisi libera, *Minerva ginec. (Torino)* 11:547, 1959.
17. Andrews, B. F., Wolfe, W. M., Jr., Hoffman, J. H., and Kalayil, P. K.: Evaluation of amniotic fluid in Rh sensitized mothers: *First report of immunodiffusion studies*, Presented at the Seventh Meeting of Southern Society for Peditaric Research, Norman, Oklahoma, November 12, 1966.

Mark Your Calendar

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The Template Technique for Cleft Lip Repair†

Robert C. Kratz, M.D.*

Newport, Kentucky

The Template Technique for Cleft Lip Repair presents a method to remove the element of guess work from certain plastic surgery procedures.

IT IS not unusual to see cleft lip and cleft palate patients who have had from 10 to 20 procedures performed for their defects. Because of the extent of the defect these numerous procedures are sometimes necessary. We should however, always be searching for the single procedure which will restore function and appearance as closely to normal as possible. This ambition may never be achieved, but perhaps the number of operations may at least be reduced by more careful planning of the first procedures.

The Template Technique can be of value in whatever procedure the surgeon may choose. The advantages which it offers may be summarized in the following four points:

(1) The high degree of "guess work" and "luck" commonly associated with repair of clept lip are appreciably decreased.

(2) With the aid of a life-sized photograph of the patient, the surgeon is able to plan the operation at his desk well in advance of the actual operation. Each line of incision and operative step may be indicated on the photograph and later transferred by the template technique to the anesthetized patient.

(3) By working out these details prior to surgery, both the operating room time and the duration of anesthesia are lessened.

(4) From a teaching standpoint, the resident in surgery can plan his version of the operation on a separate, made-to-scale photograph of the patient.

A review of results obtained in my experience with operations for unilateral cleft lip has revealed a demonstrably better result in cases where I had used Tennison's method for the repair than had been possible where I had followed other surgical alternatives.[1] For the optimal surgical objective in repair of double cleft lip, I prefer the Veau III operation.[2, 3]

Materials and Methods

A full-faced, lifesized, exactly to scale photograph is taken of the patient. To assure integrity of the measurements, a centimeter ruler should be included in this picture. There is a variety of photographic equipment available which may be used (I prefer to use a Nikon F camera with a 135-mm, F3.5F/22 lens and a No. 2 supplementary lens for close-up photography. This camera is equipped with a Polaroid attachment and a ring flash for shadowless lighting.)

The photograph is taken at a distance approximately 17 inches from the subject. An F/22 setting, Polaroid 3,000 speed, and type 107 film are used.

Development of the Technique

Measurements and drawings are carefully made on the photograph, using a 1:1 scale. The template is then made, utilizing wire or x-ray film, and the diagrammatic presentation is quickly transferred from the photograph to the scrubbed skin of the anesthetized patient. Where x-ray film is used, the clear film is placed over the life-sized photograph with the drawn lines and these are traced onto the film. The template is then cut from the film with a scissors and this pattern is sterilized in benzalkonium solution. If desired No. 30 wire can be bent with a fine needle holder to match the lines on the photograph. The lines are drawn on the skin with methylene blue. The lengths of the lines are checked and adjusted with a compass. (Figure 1)

The distance from the apex of cupid's bow on the "normal side" of the lip to the center of the philtrum is taken. This distance must equal the distance from the apex of cupid's bow to the center of the philtrum on the cleft side of the lip. All these measurements usually

†*Presented at the Kentucky EENT Society Session, KMA Annual Meeting, September 28, 1967*

**Otolaryngologist and facial plastic and reconstructive surgeon, practicing in Newport*

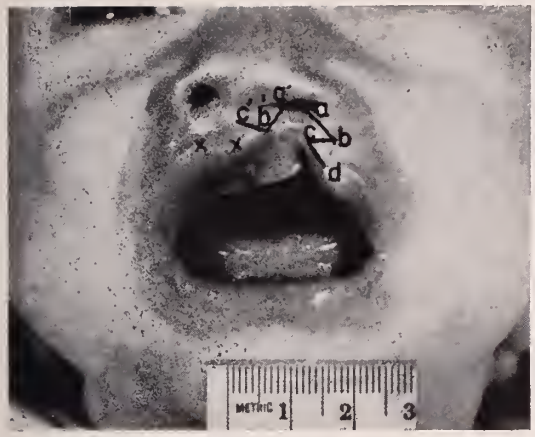






FIGURE 1. Crosshatched area (bottom left) is usually discarded unless needed to close anterior portion of cleft palate. Distance from apex of cupid's bow, normal side, to center of philtrum determines distance of b' from center of philtrum. c'b' equals xx; ab is approximately equal to bc. Angle a'b'c' is slightly greater than a right angle.

(Illustrations reproduced from Archives of Otaryngology, July 1967, Vol. 86, p. 93.)

are equal to this measurement. The base of the columella is the point a'; a is at the innermost base of the ala; b' represents the apex of cupid's bow and is equally distant from the midline of the philtrum as the apex of cupid's bow is distant on the uninvolved side of the lip. The angle a' b' c' is slightly larger than a right angle. Making c' b' equal to xx (xx being equal to xb), d is then placed at the region where the lip begins to appear thin. Next, ab is made to equal a' b', bc to equal b' c', and cd to equal c' b'. (Generally, these measurements are equal to one another.) The line ab and a' b' may vary slightly from the length of the other lines, but this is rare. The length of the lip on the cleft side equals the sum of lines ab and bd. The amount of undermining that is carried out on the cleft side of the lip is variable. For repair of the incomplete cleft lip, a triangle of tissue between the ala and the columella is excised and discarded. Such surplus tissue, however, may be utilized for reinforcement of the floor of the nose in a patient with complete cleft deformity.







FIGURE 2. Lines are sketched on photo before operation (top left). Line abc (bottom left), which has been shortened by removing wedge beneath the ala, is sutured to a'b'c'. Mucous membrane and muscle, denuded of all skin, from each side are brought across the midline and sutured beneath the prolabium.

(Illustrations reproduced from Archives of Otaryngology, July 1967, Vol. 86, p. 94.)

Bilateral Cleft Lip

The template technique may also be applied to the repair of bilateral cleft lip. As mentioned at the outset, I prefer the Veau III operation for the better result in the repair of this type deformity.[2, 3] (Figure 2)

The use of a simple elastic band attached to a cloth cap usually is sufficient for management of the prominent maxilla. Occasionally, however, a surgical set-back procedure is necessary. Should this be the case, the suture between the vomer bone and the prevomerine line must be avoided. Orthodontic consultation is strongly urged whenever reconstruction of bilateral cleft lip is planned.

The prolabium is always freed from the premaxilla and utilized. The vermilion border is preserved and approximation is verified at the end of the procedure by use of a microscope at the operating table. Both muscle and mucosa are brought across the midline, beneath the prolabium, stretching the prolabium if it is too short, and a triangle of skin is removed from beneath the ala, bilaterally. The inner part of the mucous membrane of the prolabium is used as lining for the upper lip.

Comment

My review of the published reports on repair of cleft lip has revealed that the use of a life-sized photograph in the planning of this type repair has not been done. This operative adjunct to cleft lip surgery, therefore, is brought to the attention of the otolaryngologist. It is hoped that, by presenting this simplified version of cleft lip repair by use of the photograph and the template technique, increasing numbers of surgeons will become interested in the reconstruction of cleft lip. This technique can be useful to the senior surgeon of longstanding experience as well as to his younger and less experienced colleague.

References

1. Tennison, C. W.: The Repair of Unilateral Cleft Lip by the Stencil Method. *Plast Reconstr Surg* 9:115. 115, 1952.
2. Veau, V.: *Division Palatine*, Paris: Masson and Cie, 1931.
3. Veau, V.: Operative Treatment of Complete Cleft Lip. *Ann Surg* 76:143, 1922.

Manuscript Memos

Manuscripts should be submitted in duplicate to The Journal of KMA, an original copy and one carbon, and typed with double spacing. Maximum length of an article should not exceed 4500 words; the Board of Consultants on Scientific Articles prefers that they be briefer than this when possible.

In submitting a manuscript, the author is requested to include a concise summary, not to exceed 35 words, to be used as a sub-title when the article is published in The Journal. The purpose of the summary is to create additional interest and encourage greater leadership.

Footnotes and bibliographies should conform to the style of the Quarterly Cumulative Index Medicus published by the American Medical Association. This requires in the order given: name of author, title of article, name of periodical, with volume, page, month—day of month if weekly—and year. The Journal of the KMA does not assume responsibility for the accuracy of references used with scientific articles.

All scientific material appearing in The Journal is reviewed by the Board of Consultants on Scientific Articles. The editors may use up to six illustrations, with the essayist bearing the cost of all over three one-column halftones.

Arrangements for reprints of an article should be made directly with the publisher of The Journal, Gibbs-Inman Printing Company, 817 W. Market St., Louisville, Ky.

The bylaws of the Kentucky Medical Association provide that all scientific discussions and papers read before the KMA Annual Meeting shall be referred to the KMA Journal for consideration for publication. The bylaws further state that the editor or the associate editor may accept or reject these papers as it appears advisable and return them to the author if not considered suitable for publication.

Please mail your scientific articles to The Journal of the Kentucky Medical Association, 3532 Janet Ave., Louisville, Kentucky 40205.

SPECIAL ARTICLES

Remarks of the President

MILFORD O. ROUSE, M.D.*

Doctor Rouse presented this stimulating address before the House of Delegates of the American Medical Association during the AMA's Annual Clinical Convention, November 26-29, 1967. In order to give the physicians of Kentucky an opportunity to share its contents, the editors agreed that it should be published in its entirety.

MR. Speaker, fellow officers, members of the House of Delegates, distinguished guests, my fellow practitioners, ladies and gentlemen:

In making his Clinical Convention report to the House of Delegates, I believe your president should attempt a broad view of the future. I believe he should look ahead not only from the viewpoint of our profession, but from a more broadly based view of the nation as a whole.

If we are to build a better tomorrow, our efforts and those of all citizens must be to build the nation. We cannot be content trying to build only our corner of it.

The future of the individual physician, of patient care and of the methods by which it will be made available to all people do not depend on our efforts alone. They depend also on the future attitude of the nation toward free enterprise; on the degree of future national respect for individual initiative; and on the extent of future over-all acceptance of the concept that personal satisfaction and personal benefit are to be gained principally through personal endeavor.

To state it briefly, our future depends on the preservation and strengthening of freedom for all people of our nation.

If that freedom is truly in danger — and I am among those who fear that it is — the danger does not come substantially from the few persons who are engaged actively in trying to undermine it. The greater danger stems from a lack of activity by millions of citizens whose dedicated efforts are needed if freedom is to be preserved.

Freedom is much like a great bonfire. The more people who work to feed it, tend it and protect it, the more brightly it burns. By the same law of nature, the more brightly it burns, the more people are required to support it and keep it flaming.

It is my earnest prayer that the emphasis I place on free enterprise, individual initiative and personal benefit through personal endeavor will not be interpreted by either my friends or otherwise as a denial of the rightful and vital role government plays in the life of this country and of its people.

To a society as large and diverse as this one, large government is a necessity. To a nation as strong as this one, strong government is indispensable. There are many things that can be done only by government and best by government.

There are other things, however, that can be done only by the private organizations and individual citizens working together and best by them.

There is a feature in the nature of government that keeps it from accomplishing many things that need to be done. An understanding of that factor both inside and outside of government would do much to explain the frequent frustration caused when well-intentioned programs do not live up to expectations.

The feature is that no matter how positive a government wants to be and no matter how positive the statements of its officials are, its efforts are often negative in execution.

Government can pass laws against theft, but no law can make a people want to be honest. Government can pass laws forbidding the abridgment of freedom of religion, but no law can make a people want to worship God. Government can pass laws against drunkenness, but no law can make a people want sobriety.

Even in its attempt to assure basic civil rights to all citizens, which appears positive, government can only pass laws against denying a member of any race the right to live wherever he wants and to work wherever he qualifies. No law can make families, neighborhoods, employers or workers want to share what they have with members of another race.

Government can and does try to stop people from doing undesirable things, but it cannot make them want to do desirable things.

The real danger to freedom today, as well as the cause of much frustration, anger and bewilderment, is that too many people are looking to the government to grant freedom, assure rights, build prosperity and create brotherhood — things no government in history has ever been equipped to do alone. Many people ex-

*President of the American Medical Association, 1967-1968.

pect the government to do what only they can do for themselves.

Our nation faces an apparent widespread deterioration in personal integrity, seen in practically every segment and level of society, from the repairman who does shoddy work . . . to the factory worker who gives no thought to the quality of the product he is making . . . the clerk who takes office stamps . . . the salesman who pads his expense account . . . the manager who cheats on his taxes . . . the attorney who recommends an unjustified lawsuit . . . to the physician who might expand a medical report to inflate the insurance payment to himself and his patient.

It also is seen at every level of government, from censure proceedings in our highest legislative bodies to a city where national guard troops are mustered to prevent election abuses.

Government alone cannot solve this problem. There already are laws against all of these things. The solution can come only from a heightened desire by all people to be honest themselves and a willingness to insist on integrity in their neighbors, associates and elected officials.

Government alone cannot solve the problems resulting from the loss of respect for law and order, as evidenced by increasing crimes of violence . . . the growth of organized crime . . . and the riots and demonstrations that have rocked our cities. Adding more laws to those being shattered is not a solution. The solution lies in rebuilding national respect for law at the personal level.

Government alone cannot solve the long-range problems of poverty. The appropriation and distribution of dollars, is, at best, a stop-gap measure. The final solution lies in the hearts and minds of all citizens—those directly affected and those who are not.

Ways must be found to motivate coming generations of today's poverty groups to better themselves —which can be done only with the sincere interest and help of all of their fellow citizens — through education, training and decent employment.

All of these things come only from motivation and ambition, and ambition cannot be appropriated and distributed by any legislative body. Nor can ambition be instilled into any young person until he knows without question that throughout his life he and his family will be able to go to school, work, worship and live where they wish, when they match desire with appropriate effort.

If we accept this interpretation of the functions and unavoidable weakness of government, then we must answer an obvious question: if the government is unable to do certain things, who will do them?

The answer to that question has been given a number of times, but I shall repeat and emphasize it here: we citizens must do them in order to protect our own freedom; and to avoid forcing the government or inviting the government into areas where the people should serve themselves.

Leaders in government understandably see it as their duty to do for the people of this country whatever they believe, or whatever they are told by citizen groups, is not already being done equitably, effectively and efficiently by the private sectors of society.

When private citizens abdicate their responsibilities and ask the government to do a job, government responds in the only way it can: it passes more laws and usually appropriates more money. And every time another law is passed, it means another small or large restriction on somebody's freedom.

As citizens, in other words, we have this choice when facing a situation that needs correcting. We can do it ourselves; or we can ask the government to pass a law that says we must not fail to do it — and that sets up an administrative mechanism to enforce the prohibition.

The former choice is by far the best way to meet a situation, at least from the standpoint of economy and independence; and often from the standpoint of speed efficiency and effectiveness, depending on the nature of the problem.

The government will be called on to help. Its resources and responsibilities certainly cannot and should not be overlooked. But the initiative, leadership and work should remain in the hands of the citizens.

Let's see briefly how this applies in just two areas of our professional interests.

One is the rising price of health and medical care, a topic to which I hope you will give your most serious consideration as you act on the reports on this subject from your Board of Trustees, Councils and Committees.

The major content of these reports amplifies and updates the action of the House of Delegates last June in stating that it is the responsibility of every physician to help his patients get the most out of their health care dollars; and to make himself more efficient and productive.

An appropriate back-drop for the rendition of high quality medical care, available to all, at reasonable costs, may be found in the re-statement of the purposes and responsibilities of the American Medical Association, as outlined in eleven simple declarations to be considered later at this session.*

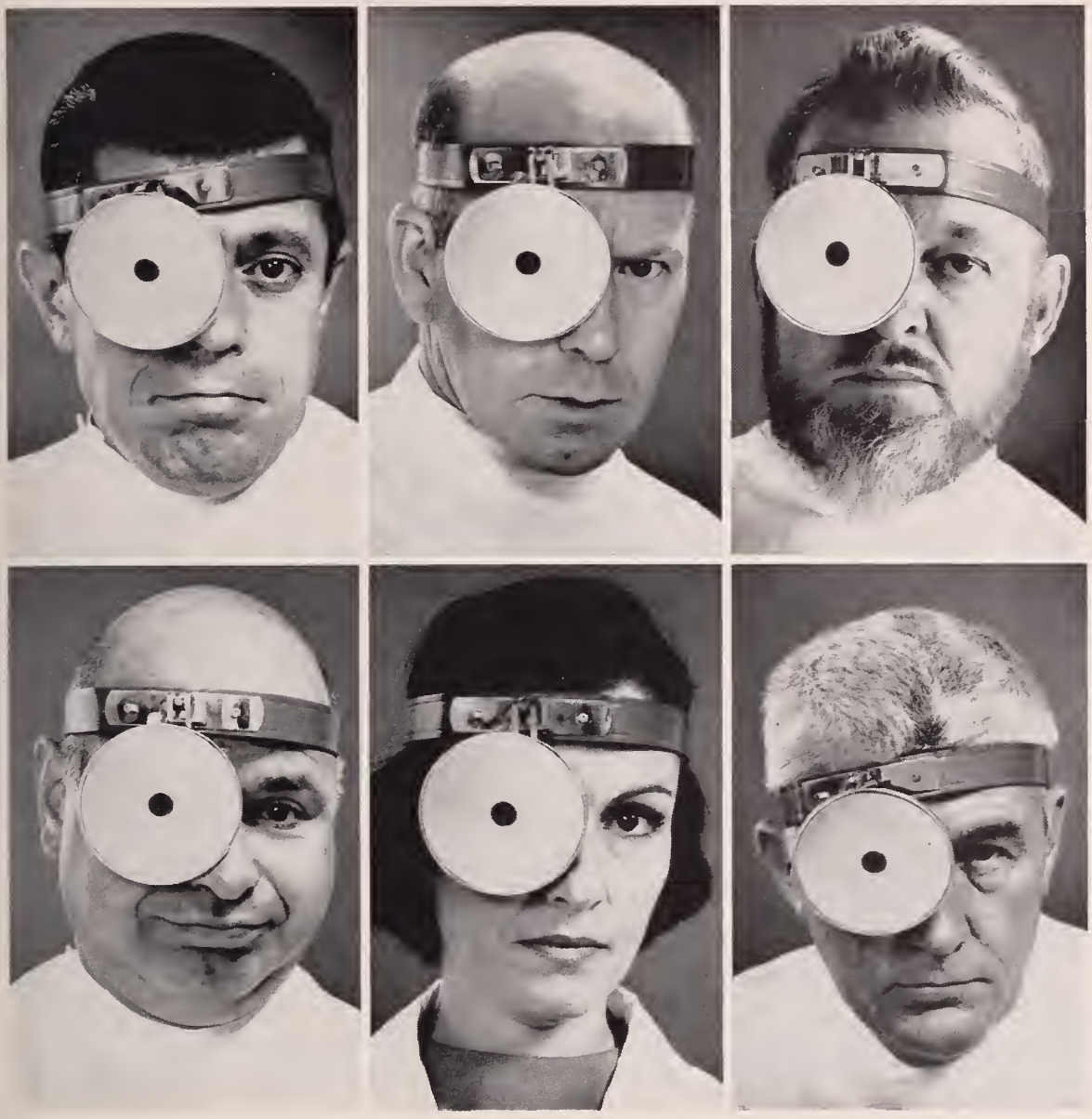
No element of the total picture has aroused more interest than the inevitable escalation of health care costs. A great many things are being said, and a great many actions are being proposed, by people inside and outside of the health care field.

For example, the Department of Health, Education and Welfare's medical price study . . . a statement by the director of the Social Security Administration's Bureau of Health Insurance expressing concern over rising health care costs and warning that if it continues, the public will demand a change . . . the American Public Health Association's resolution that a congressional report on health costs is urgently needed to guide both the public and private sectors of the health care economy . . . and the president of the AFL-CIO's denunciation of what he called the "relentless escalation of doctors' fees" and his call for federal controls over physician charges to medicare patients.

The widespread concern is hardly surprising. Heath care is a major budget item. In 1965 the people of our

(*Continued on Page 374*)

*Published in the February issue of *The Journal of KMA*, page 180



"All Otolaryngologists are Alike"

Just look at them and you can see how much they have in common. Besides, they all go through pretty much the same training, and pass the same kinds of tests, and measure up to the same sort of standards. Therefore, all otolaryngologists are alike. Right?

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(However, adverse reactions may occur. For a complete listing, please refer to the full prescribing information which is summarized below.)

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(Continued from Page 370)

nation spent more than $28 billion for it. Adding to that the tax money the federal government spent for its programs brings the total above $40 billion for the year. It likely will reach $50 billion this year.

The AMA Department of Survey Research has determined that from 1957 through 1966, physicians' fees increased 33 per cent; hospital daily service charges went up 78 per cent; and the total cost of health care rose 34 per cent — all during a ten-year period.

The increase in physician fees was greater than the percentage increase in the cost of food and housing, which also are basic needs of all people.

Of course, the increasing costs of health care have been caused by a great many easily recognizable factors, such as over-all inflation . . . higher salaries for health personnel, particularly in hospitals . . . government payment for the care of the indigent and elderly which physicians once furnished free or for a reduced charge . . . and tremendous increases in demand, brought about by the success of health care methods, a rapidly growing population, increasing national affluence and, to a large extent, by government itself, whose programs and promised benefits can be expected to continue expanding.

Whatever the causes, however, the problem is there. The existence of good reasons for it does not justify our taking no action about it.

And the existence of the problem poses a real threat of restrictive legislation designed to control the cost of health care services—at least to government-sponsored patients, and possibly to all patients.

If that threat is to be averted, it is mandatory that hospitals, the drug industry, our medical profession and all others involved in health care furnish positive leadership and take visible action to promote efficiency and minimize costs.

The other area I wish to mention does not pose exactly the same type of problem, but is an important part of promoting efficiency and minimizing costs of health care. It also is a vital part of unifying all elements of health care and of giving the entire field a single voice with which to answer criticism and with which to expound the plans and methods for future health care delivery to all of the people of our country.

The area is our relationships with other health professions and with all allied health personnel.

As much as we cherish our traditional spirit of independence, the time has long since passed when the physician could think of himself as working alone. In recent years we have said that every physician involved in health care had 10 people working with him. Right now it is probably more accurate to say he has 13. By 1972, the number will be approximately 17.

If you count all the people in the field—including physicians, other professionals and technicians, as well as administrators, accountants, aides, custodians, maids and the like—you find seven and a half million workers in some area of health.

In such a field of our economy, that employs the skills of seven and a half million people; that accounts for some $50 billion of expenditure every year; and that includes approximately 125 professional and subprofessional groups; the inter-relationships among the groups and personnel are of tremendous importance.

We accept as a matter of course—and I believe the public and other elements of the health area recognize —that the medical profession has primary responsibility for over-all developments in medicine. Consequently, it is urgent that careful, continuing, in-depth consideration be given at medicine's policy and staff levels, to the many problems of relationship which the profession and the public have with allied health professions and services.

Being responsible to the largest degree for the quality of medical care, we are responsible for presenting our thoughtful opinions as to the manner in which all health services are rendered.

At the same time, however, we must look carefully at the groups working with medicine in order to recognize and respect the various degrees of maturity within them. Many have professional status of their own and are not eager to be considered as working under physicians. They prefer to work with physicians.

Dentists continually increase their professional competence and their ability to serve. Pharmacists make up one such group, as do nurses. Veterinarians have a recognized role in health in the United States. Others we must see from this viewpoint are chemists, psychologists, biophysicists, bacteriologists, and others, plus the many different kinds of technicians and technologists.

As demand for health care and pressures on health personnel have increased in recent years, the health and medical specialty groups have begun to appreciate that they are part of something greater than themselves. In a number of instances, they have turned to the American Medical Association and have become more closely affiliated with its activities.

This fortunate tendency can be ascribed to awareness of the necessity for interdependence between all specialty groups and the AMA; an interdependence that is important to them and to us.

The same tendency is true in the research and academic communities. Membership of academicians in the AMA is now at its highest level, and more of these excellent people are working as members of our councils and committees.

Cooperation at the national level of professional and technical associations, however, is not enough. I wish to emphasize the importance of cooperation between the individual physician and his allies, especially those upon whom he depends in the course of his daily practice—including nurses, receptionists, secretaries, medical technicians, x-ray technicians, physical and occupational therapists, inhalation therapists, all medical assistants, as well as members of the health insurance industry.

All of these co-workers want and deserve recognition and appreciation as full members of the health team.

Perhaps I should emphasize, too, the fact that they also are human beings. As such, they want to know that their dedication and the importance of their work are recognized by their physician employers and allies.

(Continued on Page 400)



Whether True or False—

It Seems To Make No Difference

IN THE January issue of the KAGP Journal is published the full text of an address by Bert Seidman, Director, Department of Social Security, AFL-CIO, Washington, D.C. on the subject "Problems In Medical Care from a Union Viewpoint." This was the annual Arthur O. Goodman lecture on December 14, 1967 and was well attended by host members of the Jefferson County Academy Of General Practice and their guests. Rarely, if ever, has any of us listened to so unwarranted a denunciation of American physicians and of the AMA in particular. We have heard addresses by Labor leaders and HEW officials and have sat in day-long conferences with them. They have generally been courteous, factual. and friendly and tried to present a viewpoint with candor and accuracy. Most of us felt differently about Mr. Seidman's talk.

The same issue of the KAGP Journal printed a comment by Donn L. Smith, M.D., Dean of the U of L School of Medicine, calling attention to inaccuracy and unfair implications in the address, especially as it related to control of and information regarding drugs, and the charge that the AMA opposes reform in medical care and practice. There were, we feel, many other gross inaccuracies and insinuations in the address which merit comment. This has been postponed until inquiry could be made to verify or disprove some of his statements.

Mr. Seidman believes a prepayment insurance is much better than fee-for-service which is generally all right, with some reservations, but he supports his belief with this statement, "When a patient does become ill, the physician is free to outline the course of treatment based on his professional judgement as to what is required rather than on what the patient has in the way of insurance." What an insulting implication! Another statement is, "We in labor strongly believe that no one should be denied the right to necessary and available medical services simply because of lack of funds." It is very doubtful if any one of the 150 or so physicians who heard him or anyone who reads this ever denied his service to any patient "simply because" he did not expect to be paid.

Speaking before a general practice group, the guest naturally would extoll the virtues of and the necessity for G.P.'s and why not—there is no difference of opinion here. But where does he get the idea that, "85 to 90 percent of our medical students are in training for a specialized practice?" Not the dean nor any faculty members, not even the medical student's wife, can tell what training he will seek nor what field of activity he will enter. Today approximately 30 percent (over 66,000) of physicians are in general practice. Almost an equal number (over 58,000) are in the medical specialties—internal medicine, cardiology, allergy, gastroenterology—which are but extensions of general practice. It can fairly be said then that approximately 50 percent of practicing physicians devote themselves to the general, daily office-hospital-home care of our people. That doesn't seem to be so outrageously bad.

Our speaker said, "Only this year, in 1967, has the AMA suddenly discovered that we have a shortage of physicians in this country. Until now, for 30 years they have immediately pooh-poohed the idea whenever anyone even mentioned the possibility." No more untrue nor unfair statement could be made. In 1951, Doctors Anderson and Manlove from the AMA Bureau of Education came to Kentucky at the request of the KMA to evaluate the need for a new medical school. The shortage of physicians

was then apparent and tabulated by this Bureau of the AMA and has been declared before and constantly since then. Our new medical school in Lexington was organized in 1954 with the approval and help of the AMA. In 1952 there were 79 medical schools in this country; in 1967 there were 94, an increase of 15 in 15 years, all with the approval and help of AMA. Moreover, there has been an increase in the enrollment of students in every existing school where this was feasible. Nine additional medical schools are scheduled to open within the next four years.

Some of the statistics used by our guest were very difficult either to verify or to disprove, but if they were as inaccurate and as misleading as those we could check, we as an audience were grossly misinformed. He was pleasant enough personally and a very good speaker, but he managed to convey the general idea that he, and labor generally, have a dim—we think grossly distorted—view of American medicine and the AMA.

SAM A. OVERSTREET, M.D.

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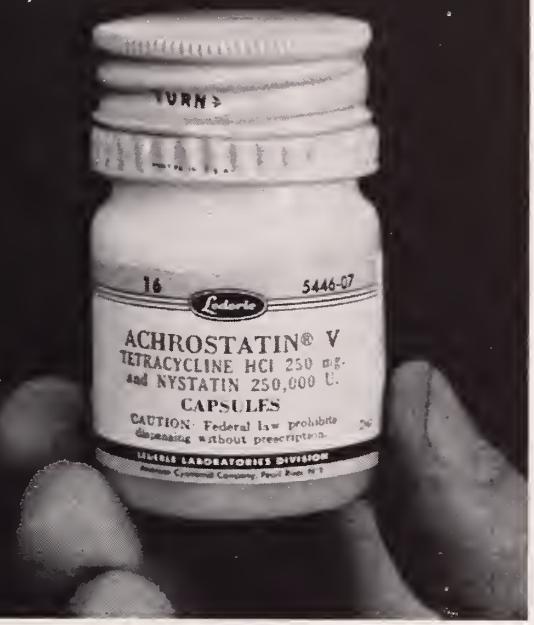
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(See Page 378 for details)

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ORGANIZATION SECTION

High Attendance Anticipated At KMA Interim Meeting

The attendance of a large number of Kentucky physicians is expected at the 18th annual KMA Interim Meeting April 17-18 at the White House Inn (formerly the Lamplighter-Statler Hilton), Covington, according to advance registration reports.

An excellent program of speakers has been planned during the session as well as an Orientation Program for new members, and meetings of the KMA Board of Trustees and the Woman's Auxiliary.

A panel discussion of the Ohio Valley Regional Medical Program will highlight the opening session dinner meeting April 17. Participants will be Robert Q. Marston, M.D., Bethesda, Md.; Louis Wozar, Dayton, Ohio; Walter I. Hume, Jr., M.D., Louisville; and James B. Holloway, Jr., M.D., Lexington, moderator.

Prominent national authorities appearing on the program the following morning include Francis L. Land, M.D., Washington, D.C.; Blair J. Henningsgaard, M.D., Astoria, Ore.; and Richard S. Wilbur, M.D., San Francisco, Calif.

The meeting will close with a luncheon session April 18 featuring guest speaker Philip R. Lee, M.D., Washington, D.C., who was recently appointed to a new position in which he directs all of the federal health programs under the Department of Health, Education and Welfare.

George F. Brockman, M.D., KMA president, urges all physicians who have not finalized their plans to make arrangements to participate in what promises to be an outstanding meeting.

Color TV and Scientific Programs To Highlight AMA Convention

Color television coverage of medical events, four general scientific programs concerning a variety of topics, scientific and industrial exhibits and medical motion pictures will be a few of the many highlights of the 1968 Annual Convention of the American Medical Association June 16-20 in San Francisco, Calif.

The Scientific Awards Dinner, honoring the award winners, has been planned Wednesday, June 19. Numerous other events are scheduled during the convention, as well as many related meetings preceding or following the five-day session. Further details will appear in the May and June issues of The Journal.

AMA President Milford O. Rouse, M.D., invites all physicians to attend this important medical meeting and urges that you make your hotel reservations immediately.

Third KMA Trustee District Plans April 23 Meeting

The annual meeting of the Third KMA Trustee District will be at 6 p.m., April 23, at Ivory Tower Inn, Hopkinsville, according to Gabe A. Payne, Jr., M.D., Hopkinsville, trustee for the district.

KMA President George F. Brockman, M.D., Greenville, will be the featured speaker at the meeting. He will share the program with Fred C. Rainey, M.D., Elizabethtown, state affairs chairman for the Committee on Legislative Activities.

The Christian County Medical Society will host the meeting. The Society's Auxiliary will also meet at the time of the trustee district meeting.

Three KMA Trustee Districts Schedule May Meetings

The Thirteenth, Fourteenth and Fifteenth KMA Trustee Districts have scheduled meetings in May at which KMA President George F. Brockman, M.D., Greenville, will be the featured speaker.

The Thirteenth District will meet May 14, according to Walter L. Cawood, M.D., Ashland, district trustee. The Fourteenth District has planned a meeting May 22 at Union College, Barbourville, which will include a scientific program arranged by Harold Bushey, M.D., Barbourville, according to E.C. Seeley, M.D., London, district trustee.

Ballard W. Cassady, M.D., Pikeville, trustee, has announced that the Fifteenth District will meet May 23. Letters containing complete details on these meetings will be sent to physicians in the three districts as soon as final arrangements have been made.

To the Self Employed

Several questions have been asked concerning investment mechanisms by which the Self-Employed Individuals Tax Retirement Act (Keough Act) can be implemented.

Contributions can be invested as follows:

1) A special Government retirement bond.
2) An insurance annuity.
3) Through a bank acting as trustee.
4) Through a custodian account with a bank if investments are made in mutual fund shares.

KAGP Annual Assembly To Have Prominent Guest Speakers

Two prominent guest speakers will highlight the program of the opening day session of the Seventeenth Annual Scientific Assembly of the Kentucky Academy of General Practice, according to Ben F. Roach, M.D., Louisville, convention chairman. The Assembly will be held May 8-10 at Convention Center, Louisville.



Doctor Klein

Edmund Klein, M.D., Buffalo, N.Y., who has been asked to deliver the first John F. Kennedy Foundation lecture in Boston, will deliver two addresses on the morning of May 8 to the KAGP Assembly. Recognized as one of the country's top authorities in treating malignant skin lesions with local chemotherapy, Doctor Klein will discuss "Immunotherapy of Superficial Tumors" and "Topical Cytostatic Therapy in Malignant and Pre-Malignant Skin Lesions."

A humorous, illustrated talk entitled "The Surgical Mystique" will entertain KAGP members and their wives at the luncheon session May 8. The speaker, Leonard L. Lovshin, M.D., Cleveland, Ohio, describes his talk as "a lighthearted spoof on surgeons." The luncheon is open to the public.

Doctor Lovshin is head of the department of internal medicine at the Cleveland Clinic and vice chairman of the Board of Governors of the Cleveland Clinic Foundation. He is a graduate of the University of Wisconsin Medical School.

A variety of medical subjects of interest to the general practitioner will be presented by outstanding authorities during the three-day session. The Academy's annual banquet will be at 7 p.m. May 9. Thornton E. Bryan, Jr., M.D., Cadiz, is the KAGP president. President-elect Elmer G. Prewitt, M.D., Corbin, will take office during the Assembly.

Eleven-Member Ky. Delegation Attends AMPAC Workshop

A Kentucky delegation of 11 KEMPAC representatives attended the annual Workshop of the American Medical Political Action Committee March 9-10 at the Sheraton Park Hotel, Washington, D.C. The purpose of the Workshop, according to the AMPAC office, is "to help physicians and their wives become increasingly effective at the congressional district level."

Highlights of the Workshop included presentations by Senators Daniel K. Inouye of Hawaii and George Murphy of California, and Rep. Melvin Laird of Wisconsin. Hoyt D. Gardner, M.D., Louisville, national affairs chairman for the KMA Committee on Legislative Activities, served as a discussion leader in a portion of the program devoted to problem-Solving Clinics.

In addition to Doctor Gardner and Mrs. Gardner, the Kentucky delegation, led by John C. Quertermous, M.D., Murray, chairman of the KEMPAC Board, included Henry B. Asman, M.D., Louisville, KMA



Senator George Murphy of California, guest speaker at a March 10 luncheon during the annual AMPAC Workshop at Sheraton Park Hotel, Washington, D.C., chats with the Kentucky delegation and others who attended the two-day session. In the first row (from left to right) are Henry B. Asman, M.D., Louisville; John C. Quertermous, M.D., Murray; Robert G. Cox, Louisville; and James Imboden, Columbus, Ohio, AMPAC field representative. Pictured in the second row (from left to right) are Harry Hinton, Washington, D.C., assistant director of AMPAC; Cecil Grumbles, M.D., Louisville; Carl Cooper, M.D., Bedford; Mrs. Grumbles; Senator Murphy; Mrs. Fred C. Rainey, Elizabethtown; Doctor Rainey; Mrs. Hoyt D. Gardner, Louisville; Doctor Gardner; and Mrs. Fay Miles, Louisville.

president-elect; Carl Cooper, M.D., Bedford, vice-speaker of the KMA House of Delegates; Cecil Grumbles, M.D., Louisville, KEMPAC Board member, and Mrs. Grumbles; Fred C. Rainey, M.D., Elizabethtown, state affairs chairman for the KMA Committee on Legislative Activities, and Mrs. Rainey; Robert G. Cox, KMA assistant executive secretary, and Mrs. Fay Miles, KEMPAC office secretary.

Ky. Div., American Cancer Society To Support Ob-Gyn Meeting

Through the financial support of the Kentucky Division of the American Cancer Society, four distinguished guest lecturers will participate in the annual meeting of the Kentucky Obstetrical and Gynecological Society April 26-27 at Stouffer's Inn, Louisville, according to Laman A. Gray, M.D., Louisville, president of both societies. The meeting is open to the entire medical profession.

Professor John Stallworthy of Oxford University, England, recognized as one of the world's most distinguished speakers on the subject of problems of cancer in women, the program's theme, will come to Kentucky by special arrangement. He will deliver an address entitled "The Alpha and Omega of Uterine Cancer" at the Society's dinner meeting April 26. Interested citizens are invited to attend, Doctor Gray said.

Three prominent American physicians will also participate in the two-day meeting. They are Howard W. Jones, M.D., Johns Hopkins School of Medicine, Baltimore, Md.; Felix Rutledge, M.D., Anderson Hospital, Houston, Texas; and Richard Symmonds, M.D., Mayo Clinic, Rochester, Minn.

The Kentucky Obstetrical and Gynecological Society is grateful to the American Cancer Society through the Kentucky Division for making this meeting possible.

Visiting Professor of Radiology To Lecture at UK Med. Center

David H. Baker, M.D., New York City, will be a visiting professor of radiology at the University of Kentucky Medical Center April 23-26, according to Harold D. Rosenbaum, M.D., professor and chairman of the Center's department of radiology. Doctor Baker is director of radiology at Babies Hospital and associate professor of radiology at Columbia-Presbyterian Medical Center.

"Hirschspring's Disease" will be discussed by Doctor Baker at noon on April 23 and "Bone Dysplasias in Dwarfism" will be his topic at 10:30 a.m. April 25. Doctor Baker will also participate in three pediatric conferences during his visit to the Center.

As reported in the March issue of The Journal, Doctor Baker will also be a guest speaker at the annual meetings of the Kentucky Chapters of the American Academy of Pediatrics and the American College of Radiology April 24 and 26 respectively. His topic at both meetings will be "Surgical Emergencies in the Newborn Mimicking Medical Respiratory Disease."

Ky. Surgical Program To Feature Speaker from Yale University

Mark A. Hayes, M.D., New Haven, Conn., professor of surgery at Yale University, will be the guest speaker at the annual meeting of the Kentucky Surgical Society, according to Blaine Lewis, M.D., Louisville, secretary-treasurer. The meeting is scheduled May 17 and 18 at Park Mammoth Resort, Park City.



Doctor Hayes

Doctor Hayes will discuss "Congenital Anomalies of the Bile Duct Colon: Hazards and Helps." A 1940 graduate of the University of Michigan Medical School, Doctor Hayes served as a member of its faculty from 1947 to 1952 when he joined the faculty of Yale University.

A diplomate of the American Board of Surgery and a fellow of the American College of Surgeons, Doctor Hayes is a member of numerous surgical societies.

May 5-11 Proclaimed by Governor As State Immunization Week

Immunization Week in Kentucky will be observed this year May 5-11, according to Ralph D. Lynn, M.D., Elkton, chairman of the KMA Community and Rural Health Committee.

The purpose of the program is to achieve, as nearly as possible, complete immunization in the state against polio, diphtheria, pertussis, tetanus, smallpox, typhoid fever and measles.

In proclaiming Immunization Week, Governor Louie B. Nunn has joined the Kentucky Medical Association and other state organizations in urging all Kentuckians to check the immunization records of their families.

Children need immunizaiton most, Doctor Lynn points out, but adults should keep track of their own records, particularly in the case of the major communicable diseases. All KMA members are urged to check the immunization records of families under their care, with special emphasis on children. The success of the program depends on physicians, Doctor Lynn said.

Physician Pilots Plan Meeting

Kentucky Flying Physicians will discuss plans for a state "fly-in" and other future activities at 4 p.m., April 17, following the KMA Interim Meeting at the White House Inn, Covington. George Gumbert, Jr., M.D., Lexington, president of the national Flying Physicians Association, urges all physician-pilots to attend.

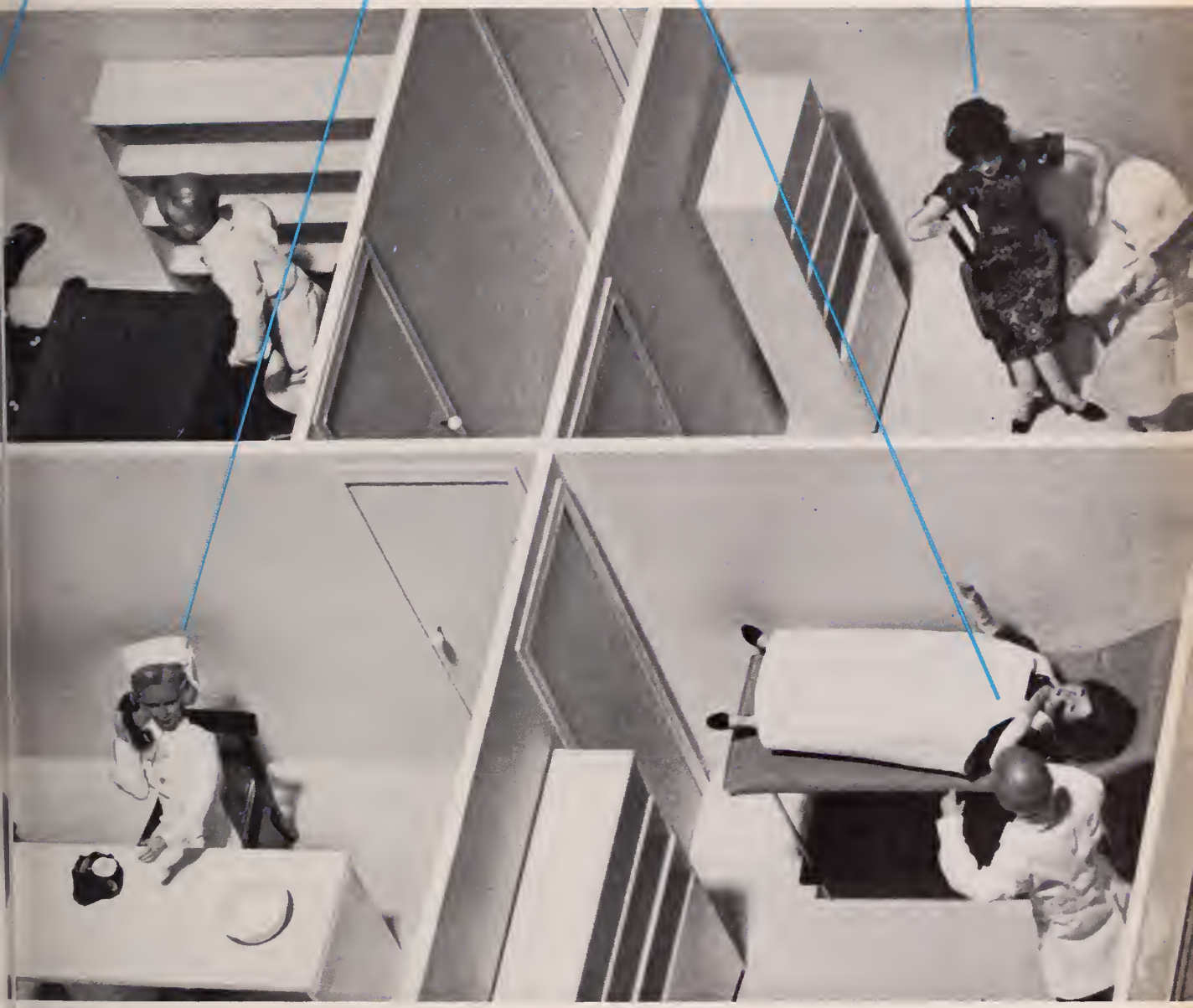
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doses in excess of those recom-
ed were used for long periods of time. May potentiate central nervous system depressants, atropine, and phosphorus insecticides. Where complete mental alertness is required, administer the drug cautiously and increase dosage gradually. In addition, orthostatic hypotension (especially in female patients) has been observed. Epinephrine should be avoided in treatment of drug-induced hypotension.

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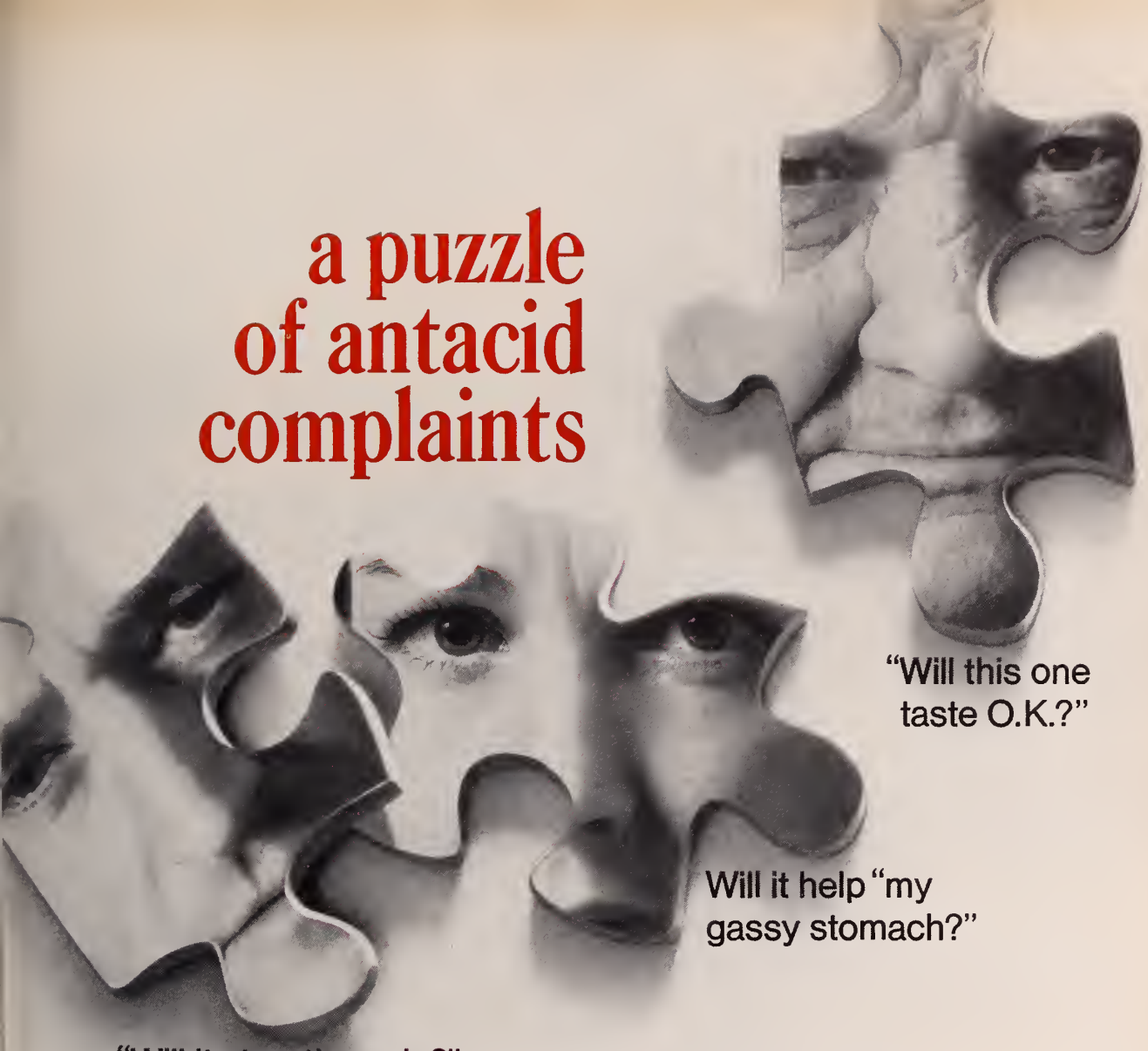
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References: 1. Shuman, C.: Am. J. Med. Sci., 225:54, 1953. 2. Perchuk, E., et al.: Angiology, 12:102, 1961. 3. Rawls, W., et al.: Med. Times, 87:818, 1959.
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References: 1. Hoon, J. R.: Arch. Surg. *93*:467 (Sept.) 1966.
2. Danhof, I. E., Personal communication.

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As a sinusitis deterrent, NTZ Nasal Spray can be used to keep the nasal passages open during a cold to help prevent development of acute sinusitis—or to help prevent the acute condition from becoming chronic.

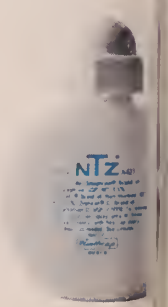
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Third Children's Diabetes Camp Set August 4-17 in Lexington

The Kentucky Diabetes Association will sponsor a third annual children's diabetes camp August 4 through 17, according to Robert J. Alberhasky, M.D., a member of the Association's camp committee.

The Lexington YMCA's Camp Daniel Boone on the Kentucky River has again been chosen as the site for the two-week event. Boys and girls from eight to 15 years of age will be accepted, Doctor Alberhasky said.

In addition to usual camp activities, a program of instruction on diabetic care has been planned this year. Physicians are urged to make this information available to the parents of all of their eligible diabetic patients.

Complete details about the plans for the camp may be obtained from the Kentucky Diabetes Camp Headquarters, Fincastle Bldg., Louisville, Ky., 40202.

Contribution to Scholarship Fund Honors Graduation Centennial

In memory of her father, Garrett D. Smock, M.D., who received his medical degree from the University of Louisville 100 years ago, Mrs. F. J. Snider, Elizabethtown, presented the Rural Kentucky Medical Scholarship Fund with a check for $2,500 recently.

Included with Mrs. Snider's contribution were three of Doctor Smock's documents—his medical diploma and Louisville Dispensary diploma, both dated 1868, and a copy of his article entitled "The True Relation Between the Pharmacist and the Physician", published August 15, 1898, in *American Practitioner and News.*

According to Mrs. Snider, Doctor Smock first practiced in Loretto, Ky., moved to Hodgensville in 1880, and opened his own pharmacy in 1895. He continued his medical practice in Hodgensville until his death July 2, 1910.

Twenty-three Physicians Become New Members of Association

The Kentucky Medical Association added 23 physicians to its membership roster, according to the report of the membership department March 20.

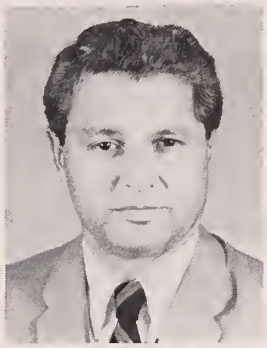
New members in Lexington are G. Nelson Copeland, Jr., M.D.; Ronald W. Dunbar, M.D.; William R. Elsea, M.D.; John L. Goiser, M.D.; Octavius E. Iglesias, M.D.; Louis M. Muldrow, Jr., M.D.; Leonard I. Stein, M.D.; and Leslie Van Nostrand, M.D.

New members in Louisville are Cyrus M. Day, M.D.; Laszlo Makk, M.D.; Charles B. Mercer, M.D.; Lynn Ogden, M.D.; Robert F. Sexton, M.D.; and Theodore Steffen, M.D.

Other new members include Lloyd M. Browning, M.D., Louisa; F. R. Buckles, M.D., Millwood; Alfredo Echiverri, M.D., Paris; Norman E. Edwards, M.D., Louisa; Violetta Hayden, M.D., Barbourville; Wally O. Montgomery, M.D., Paducah; Donald L. Peterson, M.D., McKee; Ray P. Seet, M.D., Booneville; and Walden R. Smith, M.D., Nicholasville.

Medical Assistants Convention Set May 18-19 in Lexington

The sixth annual convention of the Kentucky State Association of Medical Assistants has been planned May 18 and 19 at the Campbell House Inn, Lexington. "Knowledge is Education; Achievement is Success" will be the theme of the meeting, according to Mrs. Mabel Veech, convention chairman.



Doctor Farnsley

Henry B. Asman, M.D., Louisville, president-elect of the Kentucky Medical Association, will be the guest speaker at the Sunday luncheon which will follow the business meeting and election of officers.

Saturday's program will feature a morning session entitled "RX Office Emergencies." Speakers will include W. A. Litzenberger, M.D., Elizabethtown, and N. I. Waterman, M.D., Henry W. Post, M.D., and Charles R. Oberst, M.D., Louisville.

Following a luncheon honoring KSAMA President Mrs. Virginia Applegate, Louisville, the afternoon program, entitled "Grand Rounds" will feature Wesley Farnsley, M.D., Louisville, who will present an illustrated lecture entitled "Myths Regarding Radiation Therapy"; Condict Moore, M.D., and Daniel E. Leb, M.D., Louisville; and Erling Eng, Ph.D., Lexington. The Saturday program will conclude with a banquet.

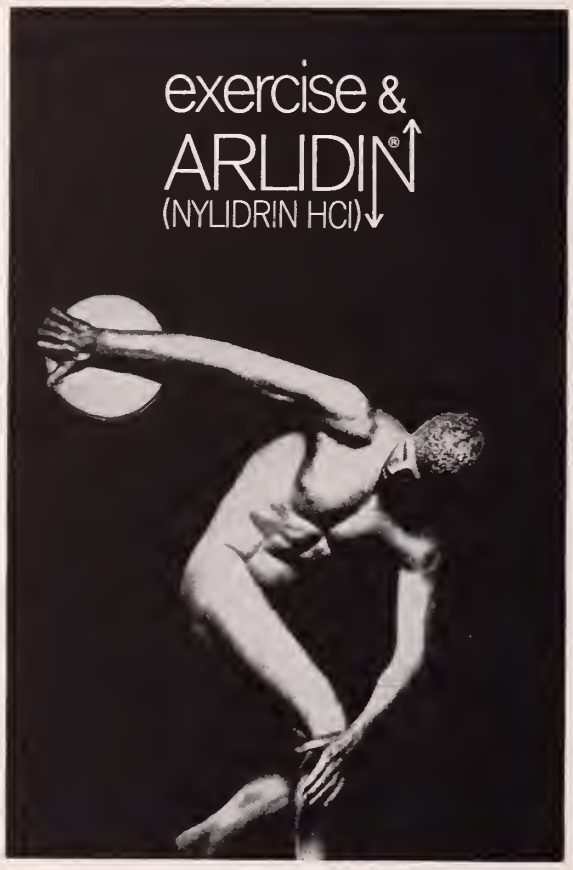
U of L Receives Pediatrics Grant

A service grant of $640,000 from the U.S. Children's Bureau for the study of high-risk pediatrics care has been accepted by the University of Louisville Board of Trustees, according to a recent press report. Billy F. Andrews, M.D. will conduct the study.

Other grants received by the University recently include $32,500 to Donn L. Smith, M.D., dean of the School of Medicine, to aid the establishment of a new department of comprehensive medicine, and miscellaneous amounts totaling $249,108 for research in medicine and related areas.

Symposium on Dextrans Planned

The first international Symposium on Dextrans, emphasizing their use in the cardiovascular field, will be held at the Flagship Hotel, Galveston Island, Texas, May 19 and 20. Further information may be obtained from the Texas Heart Association, P.O. Box 25041, Houston, Texas 77005.



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In Memoriam

LESLIE A. TATE, M.D.
Hopkinsville
1885-1968

Leslie A. Tate, M.D., 82, a Hopkinsville physician from 1909 to 1915, died February 7 at Jennie Stuart Hospital. Doctor Tate graduated from Vanderbilt University Medical School in 1909.

H. P. MOSBY, M.D.
Formerly of Bardwell
1889-1968

H. P. Mosby, M.D., 77, a Rockford, Ill. physician for 45 years, died February 9 in Rockford. A native of Bardwell, Doctor Mosby graduated from the University of Louisville School of Medicine in 1910.

JOHN R. CORUM, M.D.
Madisonville
1879-1968

John R. Corum, M.D., 89, a Hopkins County physician for more than 60 years, died February 11 at the Hopkins County Hospital. He had been ill for some time before his death.

Doctor Corum graduated from the Louisville Hospital College of Medicine in 1904. During the past several years he had operated a clinic with his grandson, William G. West, M.D.

JOHN S. CISCO, M.D.
Salyersville
1879-1968

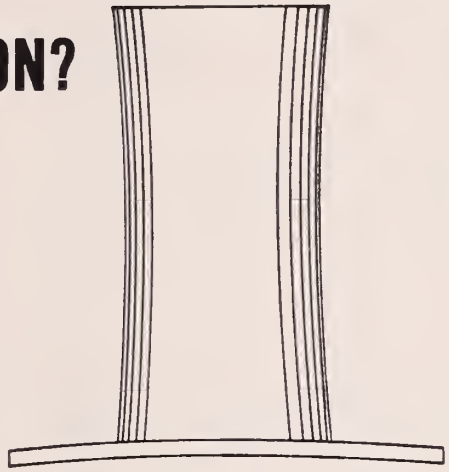
John S. Cisco, M.D., 89, a retired physician, died at Central Baptist Hospital, Lexington, February 15 after a long illness. Doctor Cisco, a 1907 graduate of the Kentucky School of Medicine, practiced for over 50 years in Salyersville.

JOHN R. PETERS, M.D.
Formerly of Louisville
1896-1968

John R. Peters, M.D., 71 a former Louisville psychiatrist, died February 20 at his home in Glendale, Calif., where he had practiced from 1950 until his retirement last year. Doctor Peters graduated from the University of Cincinnati College of Medicine in 1928 and practiced in Pewee Valley and Louisville from 1934 to 1950.

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GRIFFIN C. KELLY, M.D.
Louisville
1881-1968

Griffin C. Kelly, M.D., 87, a retired Louisville physician, died February 26 at Methodist Evangelical Hospital. Doctor Kelly graduated from the University of Louisville School of Medicine in 1904. He was an assistant Jefferson County Health officer from 1909 to 1917.

VICTOR J. JENKINS, M.D.
Hopkinsville
1920-1968

Victor J. Jenkins, M.D., 47, a psychiatrist, died March 7 at his home. Before becoming ill, Doctor Jenkins was on the staff of the Veterans Administration Hospital in Louisville. A 1958 graduate of the University of Louisville School of Medicine, he was formerly clinical director at the Frankfort State Hospital and Training School.

Dr. Keeler Honored by Jaycees

Richard Keeler, M.D., Whitesburg, was one of three recipients of the Kentucky Jaycees' "Outstanding Young Man of the Year" awards presented during the group's annual convention in Louisville recently. The awards are presented annually to young men who have made significant contributions to their professions and to the public.

Doctor Keeler was cited for his accomplishments as a member of the Regional Health Council through which he has been instrumental in establishing a number of health-care clinics, for his aid in the organization of a local Association for the Retarded, and for his work with the Mennonite Church.

COUNTY SOCIETY REPORTS

McCracken

The regular monthly meeting of the McCracken County Medical Society was held at Boswell's Restaurant in Paducah, February 28.

Eugene Sloan, M.D., Society president, urged all members to pay their KEMPAC dues for the coming year. Walter Johnson, M.D., legislative keyman, recommended that each member contact his congressmen urging them to vote against HB 48 and in support of HB 147.

Chester Blanton, M.D., a member of the Public Health Committee, stated that Judge Pelham McMurray had requested that it be possible for indigent patients to receive free Pap smears at the County Health Department. A motion to implement this request was carried.

Preceding the business meeting, a scientific discussion was presented by Richard Aach, M.D., associate professor of gastroenterology at Washington University, St. Louis. Doctor Aach discussed epidemiology of infectious hepatitis and homologous serum jaundice.

Former KAGP Staff Member Dies

Miss Cantey V. DeVane, 46, Louisville, former executive secretary of the Kentucky Academy of General Practice, died February 22 at Louisville General Hospital of injuries she received in a traffic accident February 13. Miss DeVane had been with the Academy for five years before her resignation several months ago.

KMA Committee Reports

Communication and Health Education Committee

N. Lewis Bosworth, M.D., Lexington, Chairman

KMA Headquarters Office **January 11, 1968**

Meeting for the first time during this Associational year, members of the Communication and Health Education Committee finalized plans for KMA's Sixth Orientation Course scheduled in Covington, April 17 and took preliminary steps toward the implementation of the Seventh Orientation Program to be held in conjunction with the KMA Annual Session in Louisville in September.

Action taken by the committee included a recommendation that KMA present an exhibit at the 1969 KMA Annual Meeting but for various reasons not to exhibit at the Kentucky State Fair.

Hospital Committee

James B. Holloway, M.D., Lexington, Chairman

KMA Headquarters Office **January 18, 1968**

A main item for consideration at a recent meeting of the Hospital Committee was a review and clarification of inspections of representatives of the State Health Department relative to hospitals fulfilling their obligations as set forth in hospital licensure regulations. A number of recommendations on this subject were approved for submission to the KMA Board of Trustees.

The committee members also discussed hospital accreditation "Dry Run" team visits, a recent survey relating to radiologists' billing procedures and other related matters after reviewing their activities for the previous year.

Committee on Legislative Activities

Hoyt D. Gardner, M.D., Louisville
Chairman for National Affairs
Fred C. Rainey, M.D., Elizabethtown
Chairman for State Affairs

Country Club, Frankfort **March 5, 1968**

The Committee on Legislative Activities met on March 5 to discuss matters of legislation presently before the Kentucky General Assembly.

In attendance at this meeting were the members of KMA Board of Trustees Special Committee on Legislative Activities, George F. Brockman, M.D., president; Henry B. Asman, M.D., president-elect; and Walter L. Cawood, M.D., chairman of the Board. Official action was taken on a number of legislative matters.



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FOR RAPID CLINICAL RESPONSE

In a recent series of clinical studies, Erythrocin-Sulfas was used to treat 516 febrile cases of suspected bacterial infection. Of these, *85.5% were completely afebrile within 48 hours.*

FOR WIDE BACTERIAL COVERAGE

Among the total of 661 patients (febrile and afebrile) who could be evaluated, the *clinical cure rate* was 92.2%*

FOR OPTIMAL PATIENT ACCEPTANCE

Three forms were used in the studies, prescribed according to the age and personal preferences of individual patients:

Erythrocin® ethyl succinate-**Sulfas Granules**
erythromycin ethyl succinate-trisulfapyrimidines
for oral suspension

Erythrocin® ethyl succinate-**Sulfas Chewable**
erythromycin ethyl succinate-trisulfapyrimidines
chewable tablets

Erythrocin® stearate-**Sulfas Filmtab®**
erythromycin stearate-trisulfapyrimidines tablets

*Clinically cured included patients with complete symptomatic relief and those who had partial symptomatic relief within 72 hours with subsequent clinical cure.

803446

Please see Brief Summary on next page.

ABBOTT

BRIEF SUMMARY FOR
Erythrocin®-Sulfas

Indications For mixed infections which are more susceptible to the combination than to either agent alone. These may include susceptible gram-positive and/or gram-negative mixed infections. Not recommended in the treatment of infections expected to respond to full therapeutic doses of the antibiotic or sulfonamide alone.

Contraindications Known hypersensitivity to erythromycin or sulfonamides. Because of the possibility of kernicterus with sulfonamides, do not use in pregnancy at term, in premature or in newborn infants during first week of life.

Warnings As with other forms of sulfonamide therapy, use only after critical appraisal in patients with liver or kidney damage, urinary obstruction, or blood dyscrasias. Deaths have been reported from hypersensitivity reactions and blood dyscrasias following use of sulfonamides. Perform blood counts and liver and kidney function tests when used intermittently or for long periods.

Precautions, Side Effects Use sulfonamides with caution in patients with a history of allergy, including asthma. Mild allergic reactions (such as urticaria and other skin rashes) may occur. Serious allergic reactions have been extremely infrequent; if encountered appropriate countermeasures (e.g. epinephrine, steroids, etc.) should be administered and the drug withdrawn. Assure adequate fluid intake to prevent crystalluria and institute alkali therapy if indicated. In prolonged therapy, or when high dosage is used, maintain an alkaline urine. If oliguria occurs, discontinue therapy. Occasionally mild abdominal discomfort, nausea or vomiting may occur with erythromycin; generally improved by reduction of dosage.

If overgrowth of nonsusceptible organism occurs, withdraw the drug and institute appropriate treatment.

Adverse Reactions Sulfonamide therapy may be associated with headache, nausea, vomiting, diarrhea, hepatitis, pancreatitis, blood dyscrasias, neuropathy, drug fever, skin rash, urticaria, injection of the conjunctiva and sclera, petechiae, purpura, hematuria and crystalluria. 803446

ABBOTT

anticostive* hematinic



PERITINIC®

Hematinic with Vitamins and Fecal Softener

A tablet-a-day provides:

• Elemental Iron (as Ferrous Fumarate)	100 mg
• Dioctyl Sodium Sulfosuccinate (to counteract constipating effect of iron)	100 mg
Vitamin B_1	7.5 mg
Vitamin B_2	7.5 mg
Vitamin B_6	7.5 mg
Vitamin B_{12}	50 mcgm
Vitamin C	200 mg
Niacinamide	30 mg
Folic Acid	0.05 mg
Pantothenic Acid	15 mg

Bottles of 60

* anticostive, *adj.* (*anti* opposed to + *costive* causing constipation.) Against constipation. (Now isn't that a good idea in an iron-containing hematinic? We'll send you samples if you'll send a request on your Rx blank, addressed to Department 150.)

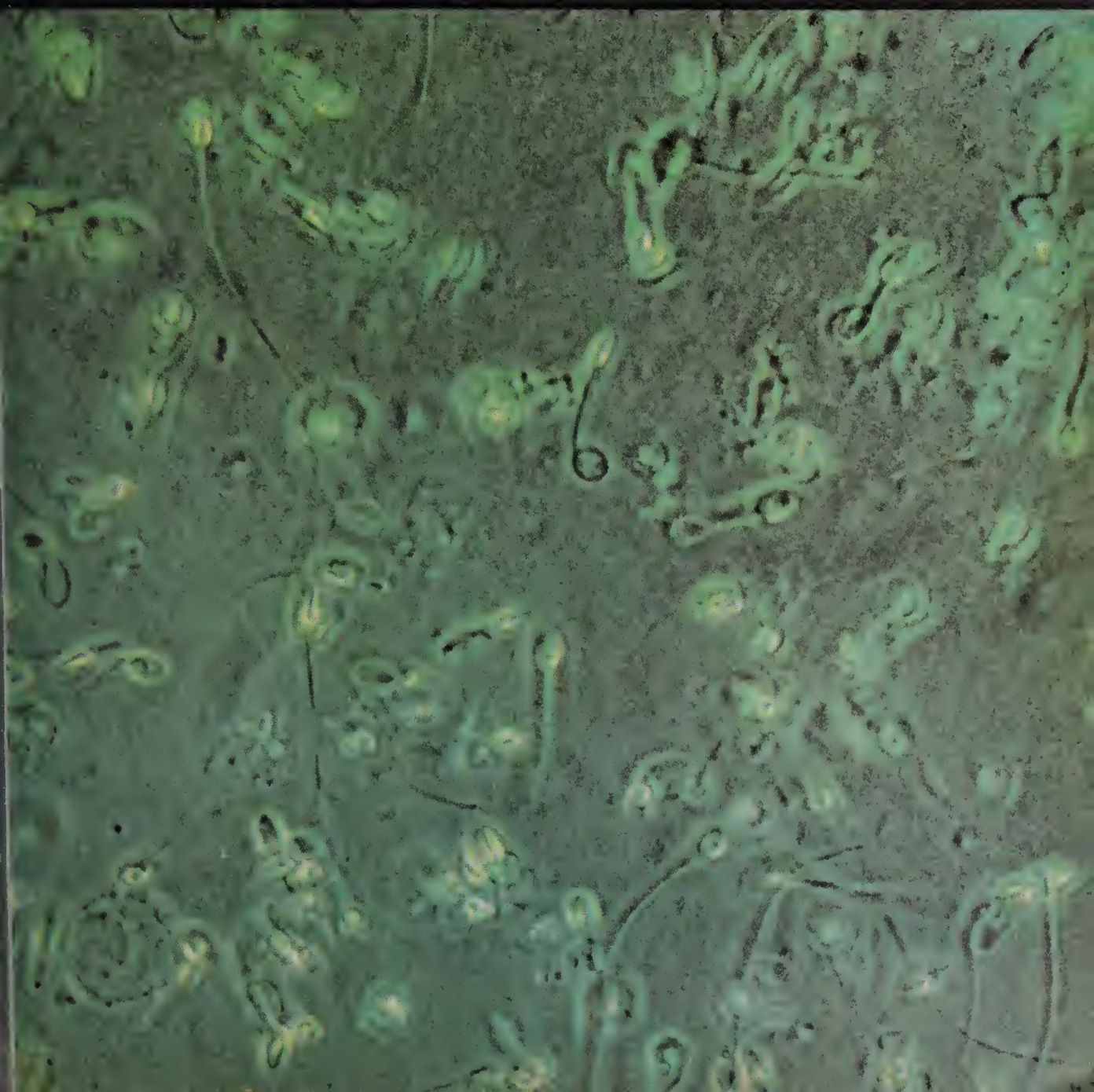
Lederle LEDERLE LABORATORIES
A Division of American Cyanamid Company
Pearl River, New York 10965

488-7—6062

When the talk turns to oral contraceptives, it makes medical sense to remember low-dose Norinyl®-1.

(norethindrone 1mg ē mestranol 0.05mg.)

Turn page for contraindications, precautions and side effects.



Reduction of oral contraceptive dosage to the lowest effective levels is a well-accepted principle of conservative medical practice. In keeping with this view, Norinyl is now also available as Norinyl-1, containing exactly one half the previous dosage of norethindrone and mestranol. Clinical experience has established that effective fertility control can be achieved with the same degree of reliability and safety with new Norinyl-1 when taken as directed.

What about switching patients from higher dosage forms?

In transferring patients to low-dose Norinyl-1 from higher-dosage oral contraceptives, some breakthrough bleeding may occur in the early cycles. In the majority of cases the bleeding episode is mild and self-limited. The long-term advantages of the lower dosage form should be weighed against the inconvenience of possible breakthrough bleeding in the individual patient.

Contraindications: 1. Patients with thrombophlebitis or with a history of thrombophlebitis or pulmonary embolism. 2. Liver dysfunction or disease. 3. Patients with known or suspected carcinoma of the breast or genital organs. 4. Undiagnosed vaginal bleeding.

Warnings: 1. Discontinue medication pending examination if there is sudden partial or complete loss of vision or if there is a sudden onset of proptosis, diplopia or migraine. If examination reveals papilledema or retinal vascular lesions, medication should be withdrawn. 2. Since the safety of NORINYL-1 (norethindrone 1 mg. with mestranol 0.05 mg.) in pregnancy has not been demonstrated, it is recommended that for any patient who has missed two consecutive periods, pregnancy should be ruled out before continuing the contraceptive regimen. If the patient has not adhered to the prescribed schedule, the possibility of pregnancy should be considered at the time of the first missed period. 3. Detectable amounts of the active ingredients in oral contraceptives have been identified in the milk of mothers receiving these drugs. The significance of this dose to the infant has not been determined.

Precautions: 1. The pretreatment physical examination should include special reference to breast and pelvic organs, as well as a Papanicolaou smear. 2. Endocrine and possibly liver function tests may be affected by treatment with NORINYL-1. Therefore, if such tests are abnormal in a patient taking NORINYL-1 it is recommended that they be repeated after the drug has been withdrawn for two months. 3. Under the influence of estrogen-progestogen preparations, preexisting uterine fibromyomata may increase in size. 4. Because these agents may cause some degree of fluid retention, conditions that may be influenced by this factor, such as epilepsy, migraine, asthma, cardiac or renal dysfunction, require careful observation. 5. NORINYL-1 should be used with caution in patients with a history of cerebrovascular accident. 6. In relation to breakthrough bleeding, and as in all cases of irregular bleeding *per vaginam*, nonfunctional causes should be borne in mind. In cases of undiagnosed vaginal bleeding, adequate diagnostic measures are indicated. 7. Patients with a history of psychic depression should be carefully observed and the drug discontinued if the depression recurs to a serious degree. 8. Any possible influence of prolonged NORINYL-1 therapy on pituitary, ovarian, adrenal, hepatic or uterine function awaits further study. 9. A decrease in glucose tolerance has been observed in a small percentage of patients on oral contraceptives. The mechanism of this decrease is obscure. For this reason, diabetic patients should be carefully observed while receiving NORINYL-1 therapy. 10. Because of the occasional occurrence of thrombophlebitis and pulmonary embolism in patients taking oral contraceptives, the physician should be alert to the earliest manifestations of the disease. 11. Because of the effects of estrogens on epiphyseal closure, NORINYL-1 should be used judiciously in young patients in whom bone growth is not complete. 12. The age of the patient constitutes no absolute limiting factor, although treatment with NORINYL-1 may mask the onset of the climacteric. 13. The pathologist should be advised of NORINYL-1 therapy when relevant specimens are submitted.

Side effects observed in patients receiving oral contraceptives: The following adverse reactions have been observed in patients receiving oral contraceptives: nausea, vomiting, gastrointestinal symptoms (such as abdominal cramps and bloating), breakthrough bleeding, spotting, change in menstrual flow, amenorrhea, edema, chloasma or melasma, breast changes (tenderness, enlargement and secretion), change in weight (increase or decrease), changes in cervical erosion and cervical secretion, suppression of lactation when given immediately postpartum, cholestatic jaundice, migraine, rash (allergic), rise in blood pressure in susceptible individuals, mental depression.

Although the following side effects have been reported in users of oral contraceptives, no cause and effect relationship has been established: anovulation post-treatment, premenstrual-like syndrome, change in libido, changes in appetite, cystitis-like syndrome, headache, nervousness, dizziness, fatigue, backache, hirsutism, loss of scalp hair, erythema multiforme, erythema nodosum, hemorrhagic eruption, itching.

The following occurrences have been observed in users of oral contraceptives (a cause and effect relationship has been neither established nor disproved): thrombophlebitis, pulmonary embolism, neuro-ocular lesions.

The following laboratory results may be altered by the use of oral contraceptives: increased sulfobromophthalein and other hepatic function tests, coagulation tests (increase in prothrombin, Factors VII, VIII, IX and X), thyroid function (increase in PBI and butanol extractable protein-bound iodine, decrease in T^3 values), metyrapone test, pregnanediol determination.

norethindrone — an original steroid from

SYNTEX

LABORATORIES INC., PALO ALTO, CALIF.

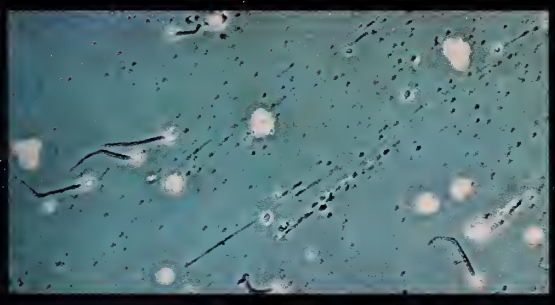
Here's why Norinyl-1 makes medical sense.

The effectiveness of Norinyl-1 as a low-dose oral contraceptive may be explained by its possible multiple action. In addition to its primary action of suppression of ovulation, Norinyl-1 may offer additional protective mechanisms... (1) creation of a cervical mucus that may be hostile to sperm penetration, and (2) development of an endometrium that may be out of phase with nidation. These effects are illustrated below.

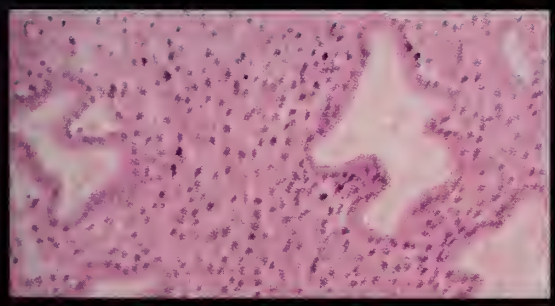
Untreated Patient



Cervical mucus at midcycle is usually thin and watery, with Spinnbarkeit (stretchability) of 15 to 20 cm.



Spermatozoa appear healthy, active, freemoving.

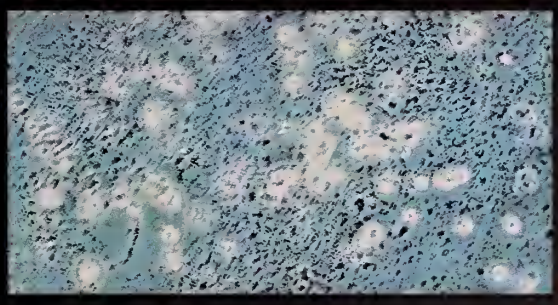


Endometrium of untreated patient is receptive to the fertilized ovum during secretory phase.

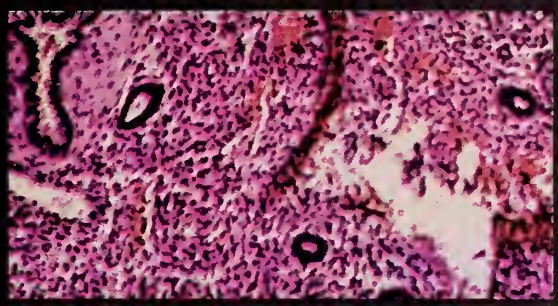
Norinyl-1 Patient



Cervical mucus at midcycle is scanty, viscous—with Spinnbarkeit of 1 cm. or less.



Immobile spermatozoa as they appear in cervical mucus taken from patient treated with Norinyl-1.



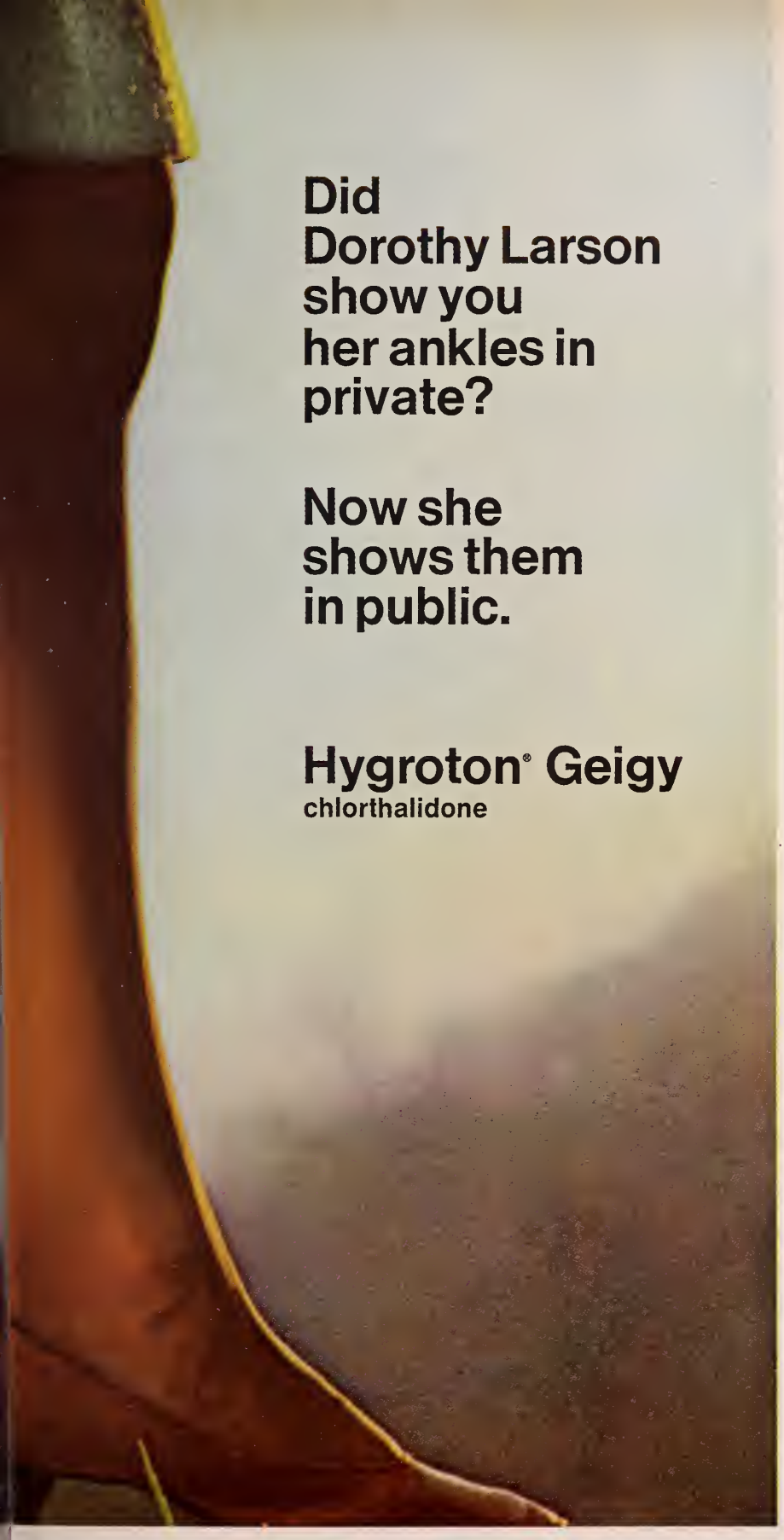
Norethindrone in Norinyl-1 accelerates secretory phase, suppresses glandular and vascular development.

Norinyl®-1 tablets
(norethindrone 1mg ē mestranol 0.05mg.)

- new low dose of time-proved ingredients
- established norethindrone/mestranol ratio
- lower patient cost



Indications: Hypertension and many types of edema involving retention of salt and water.
Contraindications: Hypersensitivity and most cases of severe renal or hepatic disease.
Warning: With the administration of enteric-coated potassium supplements, which should be used only when adequate dietary supplementation is not practical, the possibility of small bowel lesions (obstruction, hemorrhage, and perforation) should be kept in mind. Surgery for these lesions has frequently been required and deaths have occurred. Discontinue enteric-coated potassium supplements immediately if abdominal pain, distention, nausea, vomiting, or gastrointestinal bleeding occur. Use with caution in pregnant patients, since the drug may cross the placental barrier and adverse reactions which may occur in the adult (thrombocytopenia, hyperbilirubinemia, altered carbohydrate metabolism, etc.) are potential problems in the newborn.
Precautions: Antihypertensive therapy with Hygroton should always be initiated cautiously in postsympathectomy patients and in patients receiving ganglionic blocking agents or other potent antihypertensive drugs, or curare. Reduce dosage of concomitant antihypertensive agents by at least one-half. Barbiturates, narcotics or alcohol may potentiate hypotension
cause of the possibility of p
sion of renal damage, perio
determination of the BUN is
cated. Discontinue if the BU
or liver dysfunction is aggr
Hepatic coma may be prec
Electrolyte imbalance, sod
or potassium depletion may
If potassium depletion shou
cur during therapy, Hygrot
be discontinued and potass
supplements given, provid



Did Dorothy Larson show you her ankles in private?

Now she shows them in public.

Hygroton® Geigy
chlorthalidone

Your office examination confirmed Mrs. Larson's ankle edema.

You prescribed Hygroton—to get rid of the edema.

And you found that Hygroton is not only effective; it frequently costs less than other equivalent therapy.

A nice way to treat the Mrs. Larsons in your practice.

Hygroton therapy may mean troublesome side effects for some patients. A summary of the prescribing information is shown below.

...oes not have marked oli-
...cial care in cirrhosis or
...chemic heart disease and
...s receiving corticoste-
...TH, or digitalis. Salt re-
...s not recommended.
...eactions: Nausea, gastric
...vomiting, anorexia, con-
...and cramping, dizziness,
..., restlessness, hyperglyc-
...peruricemia, headache,
...amps, orthostatic hypo-
tension, aplastic anemia, leukopenia, thrombocytopenia, agranulocytosis, impotence, dysuria, transient myopia, skin rashes, urticaria, purpura, necrotizing angiitis, acute gout, and pancreatitis when epigastric pain or unexplained G.I. symptoms develop after prolonged administration. Other reactions reported with this class of compounds include: jaundice, xanthopsia, paresthesia, and photosensitization.
Average Dosage: 50 or 100 mg. with breakfast daily or 100 mg. every other day.
Availability: White, single-scored tablets of 100 mg. and aqua tablets of 50 mg., in bottles of 100 and 1000.
(B)R46-230-D
For full details, please see the complete prescribing information.

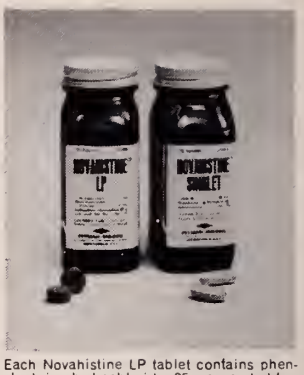
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HY-5576R

Some U.R.I. patients are more miserable than others.

That's why we make Novahistine® tablets in two different formulations.

And let you control the dosage.



Each Novahistine LP tablet contains phenylephrine hydrochloride, 25 mg.; and chlorpheniramine maleate, 4 mg.
Each Novahistine Singlet tablet contains phenylephrine hydrochloride, 40 mg.; chlorpheniramine maleate, 8 mg.; and acetaminophen, 500 mg.

With Novahistine LP tablets and Novahistine Singlet™ tablets you have the range and flexibility of decongestant dosage that lets you prescribe for the needs of the individual patient.

Novahistine LP tablets are most useful for relief of nasal congestion in patients without pain or fever. Novahistine Singlet tablets, which provide analgesic-antipyretic effect, as well as decongestant action, are indicated for upper respiratory infections accompanied by pain, aches and fever.

Whether you prescribe Novahistine LP or Novahistine Singlet, a total daily dose of 3 or 4 tablets will usually provide effective, continuous relief.

Use cautiously in patients with severe hypertension, diabetes mellitus, hyperthyroidism or urinary retention. Caution ambulatory patients that drowsiness may result.

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"Nothing else I've tried seems to work, so I decided to give you a crack at it."

When the problem is only skin deep

USE 'POLYSPORIN'® brand POLYMYXIN B-BACITRACIN OINTMENT

for topical antibiotic therapy with minimum risk of sensitization



Caution: As with other antibiotic products, prolonged use may result in overgrowth of nonsusceptible organisms, including fungi. Appropriate measures should be taken if this occurs.

Supplied in ½ oz. and 1 oz. tubes.

Complete literature available on request from Professional Services Dept. PML.

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Complete facilities for evaluation of and intensive treatment of psychiatric patients, including individual psychotherapy, group therapy, psychodrama, electro-convulsive therapy, Indoklon convulsive therapy, drugs, social service work with families, family therapy and an extensive and well organized activities program, including occupational therapy, art therapy, athletic activities and games, recreational activities and outings. The treatment program of each patient is carefully supervised in order that the therapeutic needs of each patient may be realized.

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or

Charles W. Neville, Jr., M.D.
Assistant Professor of Psychiatry and Medical Director
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Annual L. E. Smith Lecture Set

Sol Katz, M.D., chief of medical service for the Veterans Administration, Washington, D.C., will deliver the third annual L. E. Smith Memorial Lecture May 9 at Rankin Ampitheatre, Louisville General Hospital, according to a release from the Kentucky Tuberculosis and Respiratory Disease Association. Doctor Katz's lecture on pulmonary disease will be entitled "Fallacies, Foibles and Foolishness in the Film."

The annual lectures at Kentucky's two medical schools are given in honor of the late Doctor Smith, a pioneer in tuberculosis work in this state. The University of Kentucky lecture will be announced at a later date.

SPECIAL ARTICLE

(*Continued from Page 374*)

The medical assistant, in particular, is one upon whom the practicing physician depends to a great extent for the efficient running of his office. I believe every physician should encourage his assistants to become active members of the American Association of Medical Assistants and to participate in its efforts to upgrade the standards of its members.

Furthermore, I believe it is in the best interests of the physician to reimburse any and all of his employees for membership dues in their allied professional or technical societies, and to be understanding about the time involved in their assumption of leadership roles in worthwhile professional and associational endeavors.

I want to give tribute to and assure our greatest cooperation with, our most wonderful partners—the lovely dedicated wives of our Woman's Auxiliary. Again, may I call on my fellow physicians to aid these fine women in increasing their membership within a year by 10,000 to a total of 100,000. Especially valuable is their cooperation in promoting health career activity and lay health education—and countless other areas of community health service.

I believe sincerely that we have reached a point in the development of our nation, and in our development of our society, when we can no longer just cling to all of the traditions of our distinguished past. I believe the time has come for orderly, planned, meaningful change—not in the fundamentals of ethics or devotion or excellence; but in the more material features of efficiency, cost and methods of delivery of the services we render to people.

The time is for RE-VALUATION—when each of us shall sincerely recognize and inventory his own resources, capabilities, responsibilities and opportunities—and then proceed to utilize and develop them to the optimum!

Ours is a profession of ever-continuing education—by clinical experience, carefully selected but regular scientific reading, attendance at medical meetings and exhibits, and friendly interchange of knowledge with our colleagues. The physician welcomes review of his competence and service and ethics by his peers.

The physician of today and of tomorrow is an active, participating citizen of his community, carrying his share of civic responsibility. And "responsibility" includes leadership in surveying health facilities and potential health needs in his own community, followed by leadership in proper implementation. Medical citizenship calls for active participation in AMPAC and local and state political action groups.

If we should fail to recognize the present as an opportunity for positive action, and see it only as a time for resolutions of opposition, I believe we would fail not only ourselves, but the people of this country, more and more of whom need and want more and more of the services we are uniquely able to render.

Let us not make it necessary for anybody else to direct the furnishing of those services.

It is my sincere conviction that health care can and will be provided, at the highest level of quality and at a reasonable price, to an ever-increasing population in a context of competitive enterprise. Ultimately, in the continuing inter-play between government and market-oriented approaches to the organization and delivery of health care, the consumer will have to decide whether he wants to retain the right to purchase his own health care, or prefers to yield this right to government.

Freedom is never free. The price of freedom is continuing vigilance, wisdom, courage and dedicated effort.

I have unbounding faith in the only source of freedom—the people of this wonderful country!

To fight TB- find it first!

Make tuberculin testing routine with every physical examination.



TUBERCULIN, TINE TEST (Rosenthal)

Side effects are possible but rare: vesiculation, ulceration, or necrosis at test site. Contraindications: none, but use with caution in active tuberculosis. Available in 5's and 25's.

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- EMPHYSEMA
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The fast-disintegrating uncoated tablet gives relief in 15 minutes

Each tablet contains:

Potassium Iodide	195 mg.
Aminophylline	130 mg.
Phenobarbital, Caution: May be habit forming...	21 mg.
Ephedrine HCl	16 mg.

FEDERAL LAW PROHIBITS DISPENSING WITHOUT PRESCRIPTION

Precautions: Usual for aminophylline-ephedrine-phenobarbital. Iodides may cause nausea, long use may cause goiter. Discontinue if symptoms of iodism develop.

Iodide contraindications: tuberculosis, pregnancy.

DOSAGE

One tablet, with full glass of water, 3 or 4 times daily.

Dispensed in bottles of 100 and 1000 tablets.

MUDRANE GG—Formula, dosage and package identical to Mudrane—*except*—100 mg. glyceryl guaiacolate replaces the potassium iodide. The value of Mudrane cannot be enjoyed by a small group in which K.I. is contraindicated. Mudrane GG is prepared for this group.

MUDRANE GG ELIXIR—Four 5 cc teaspoonfuls is equivalent to one Mudrane GG tablet. Dosage adjusted to age and weight of child. Mudrane GG Elixir is for pediatric patients and those who think they cannot swallow tablets. Dispensed in pint and half gallon bottles.

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Tissue's healing nicely. Yet anxiety slows his steps toward recovery.

By helping overcome anxiety and tension which can thwart the convalescent's progress, Equanil® often may play an important role in medical and surgical aftercare.

ications: For use in management of anxiety and tension occurring ie or as accompanying symptom complex to medical and surgical rders and procedures. Though not a hypnotic, fosters normal through antianxiety and related muscle-relaxant properties.

ntraindications: History of sensitivity to meprobamate.

mportant Precautions: Carefully supervise dose and amounts prescribed, especially for patients prone to overdose themselves. Excessive prolonged use has been reported to result in dependence or habituation in susceptible persons, as alcoholics, ex-addicts, and other severe psychoneurotics. After prolonged excessive dosage, reduce dosage gradually to avoid possibly severe withdrawal reactions. Abrupt discontinuance of excessive doses has sometimes resulted in epileptiform seizures.

Warn patients of possible reduced alcohol tolerance, with resultant slowing of reaction time and impairment of judgment and coordination.

Reduce dose if drowsiness, ataxia or visual disturbance occurs; if persistent, patients should not operate vehicles or dangerous machinery.

Side Effects include drowsiness, usually transient; if persistent and associated with ataxia, usually responds to dose reduction; occasionally concomitant CNS stimulants (amphetamine, mephentermine sulfate) are desirable. Allergic or idiosyncratic reactions are rare, but such reactions, sometimes severe, can develop in patients receiving only 1 to 4 doses who have had no previous contact with meprobamate. Previous history of allergy may or may not be related to incidence of reactions. Mild reactions are characterized by itchy urticarial or erythematous maculopapular rash, generalized or confined to groin. Acute nonthrombocytopenic purpura with cutaneous petechiae, ecchymoses, peripheral edema and fever have been reported. One fatal case of bullous dermatitis following intermittent use of meprobamate with prednisolone has been reported. If allergic reaction occurs, meprobamate should be stopped and not reinstituted. Severe reactions, observed very rarely, include angioneurotic edema, bronchial spasms, fever, fainting spells, hypotensive crises (1 fatal case), anaphylaxis, stomatitis and proctitis (1 case) and hyperthermia. Treat symptomatically as with epinephrine, antihistamine and possibly hydrocortisone. Aplastic anemia (1 fatal case), thrombocytopenic purpura, agranulocytosis and hemolytic anemia have occurred rarely, almost always in presence of known toxic agents. A few cases of leukopenia, usually transient, have been reported on continuous administration.

Meprobamate may sometimes precipitate grand mal attacks in patients susceptible to both grand and petit mal. Extremely large doses can produce rhythmic fast activity in the cortical pattern. Impairment of accommodation and visual acuity has been reported rarely. After excessive dosage for weeks or months, withdraw gradually (1 or 2 weeks) to avoid recurrence of pretreatment symptoms (insomnia, severe anxiety, anorexia). Abrupt discontinuance of excessive doses has sometimes resulted in vomiting, ataxia, tremors, muscle twitching and epileptiform seizures. Prescribe very cautiously and in small amounts for patients with suicidal tendencies. Suicidal attempts have resulted in coma, shock, vasomotor and respiratory collapse and anuria. Excessive doses have resulted in prompt sleep; reduction of blood pressure, pulse and respiratory rates to basal levels; and occasionally hyperventilation. Treat with immediate gastric lavage and appropriate symptomatic therapy. (CNS stimulants and pressor amines as indicated.) Doses above 2400 mg./day are not recommended.

Composition: Tablets, 200 mg. and 400 mg. meprobamate. Coated Tablets, WYSEALS® EQUANIL (meprobamate) 400 mg. (All tablets also available in REDIPAK® [strip pack], Wyeth.) Continuous-Release Capsules, EQUANIL L-A (meprobamate) 400 mg.

Wyeth Laboratories Philadelphia, Pa.

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Equanil®

(meprobamate)

Wyeth

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You are "Special"
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Because doctors have the highest credit rating, take better care of their cars, and are our best customers we extend to you

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Leasing is often better than owning a car. You have no capital investment and certain tax advantages. But the main thing is you always have a dependable car at your command—a brand new car every two years, or oftener, if you wish. See us for particulars of our special plan for doctors.

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MEDICAL OR
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EQUIPMENT

Young doctors just beginning practice who need complete office furnishings and medical or surgical equipment will find our leasing plan is specially designed for them. Established doctors planning enlarged facilities and new equipment will also find our leasing plan economical and convenient. Call us for details.

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3712 FRANKFORT AVENUE,
LOUISVILLE, KY. 40207

Immune Globulin

(Continued from Page 358)

if early in gestation as a contraindication for intrauterine transfusion should our findings be substantiated by other investigators.

Addendum

Further studies in over 50 subjects have revealed that prior to 34 weeks gestation IgG bands are not usually present for mild or non-affected infants; however, such bands were present for moderate to severely involved infants, but dense bands were seen only in stillbirths or hydrops. Quantitative studies for IgG are now underway.

We wish to acknowledge the assistance of A. W. Liley, M.D. for checking on first spectrophotometric values and the obstetricians of the Greater Louisville area for submitting specimens.

References

1. Bevis, D.C.A.: Blood Pigments in Haemolytic Disease of the Newborn, *J. Obst. and Gynaec. Brit. Comm.* 63:68, 1956.
2. Liley, A. W.: Liquor Amnii Analysis in Management of Pregnancy Complicated by Rhesus Sensitization *Am. J. Obst. and Gynec.* 82:1359, 1961.
3. Liley, A. W.: Amniocentesis and Fetal Transfusion in Erythroblastosis Fetalis, *Pediatrics* 35:836, 1965.
4. Bowman, J. M. and Pollack, J. M.: Amniotic Fluid Spectrophotometry and Early Delivery in the Management of Erythroblastosis Fetalis, *Pediatrics* 35:815, 1965.
5. Freda, V. J.: The Rh Problem in Obstetrics and a New Concept of Its Management Using Amniocentesis and Spectrophotometric Scanning of Amniotic Fluid, *Am. J. Obst. and Gynec.* 92:341, 1965.
6. Lucey, J. F.: Diagnosis and Treatment of the Fetus with Erythroblastosis, *Ped. Clin. N. Am.* 13:1117, 1966.
7. Mentasti, P.: Il Protidogramma del Liquido Amniotico Valutazione con Microelettroforesi Libera, *Minerva Ginec.* (Torino) 11:547, 1959.
8. Abbas, T. M., and Tovey, J. E.: Proteins of the Liquor Amnii, *Brit. Med. J.* 1:476, 1960.
9. Wild, A. E.: The Association Between Protein and Bilirubin in Liquor Amnii, *Clin. Sci.* 21:221, 1961.
10. Walker, W., Fairweather, D.V.I. and Jones P.: Examination of Liquor Amnii as a Method of Predicting Severity of Haemolytic Disease of the Newborn, *Brit. Med. J.* 2:141, 1964.
11. Stander, R. W., McNutt, C. C., Barton, D. M., and Werts, C. E.: Characterization of Proteins of Human Amniotic Fluid by Means of Paper Electrophoresis, *Am. J. Clin. Path.* 42:125, 1964.
12. Cherry, S. H., Kochwa, S. and Rosenfield, R. E.: Bilirubin-Protein Ratio in Amniotic Fluid as an Index of the Severity of Erythroblastosis Fetalis, *Obst. and Gynec.* 26:826, 1965.
13. Strebel, L.: Immunoelektrophoretische Untersuchungen in Fruchtwasser—Vergleich mit Nabelschnurblutserum and Mutterlichem Venenblutserum, *Biol. Neonat.* 2:55, 1960.
14. Andrews, B. F., Wolfe, W. M., Jr., Hoffman, J. H. and Kalayil, P. K.: Evaluation of Amniotic Fluid in Rh Sensitized Mothers: *First Report of Immunodiffusion Studies,* Presented at the Seventh Meeting of Southern Society for Pediatric Research, Norman, Oklahoma, November 12, 1966.

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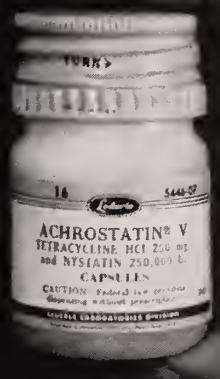
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Contraindications: Known hypersensitivity to drug; children under 6 months of age; acute narrow angle glaucoma; may be used in patients with open angle glaucoma who are receiving appropriate therapy.

Warnings: Not of value in treatment of psychotic patients, and should not be employed in lieu of appropriate treatment. As with most CNS-acting drugs, caution patients against hazardous occupations requiring complete mental alertness (*e.g.*, operating machinery, driving). When used adjunctively in convulsive disorders, possibility of increase in frequency and/or severity of grand mal seizures may require increase in dosage of standard anticonvulsant medication; abrupt withdrawal in such cases may also be associated with temporary increase in frequency and/or severity of seizures. Advise patients against simultaneous ingestion of alcohol and other CNS depressants. Withdrawal symptoms (similar to those with barbiturates and alcohol) have occurred following abrupt discontinuance. Keep addiction-prone individuals (such as drug addicts or alcoholics) under careful surveillance because of their predisposition to habituation and dependence. Use of any drug in pregnancy, lactation or in women of childbearing age requires that potential benefit be weighed against possible hazard.

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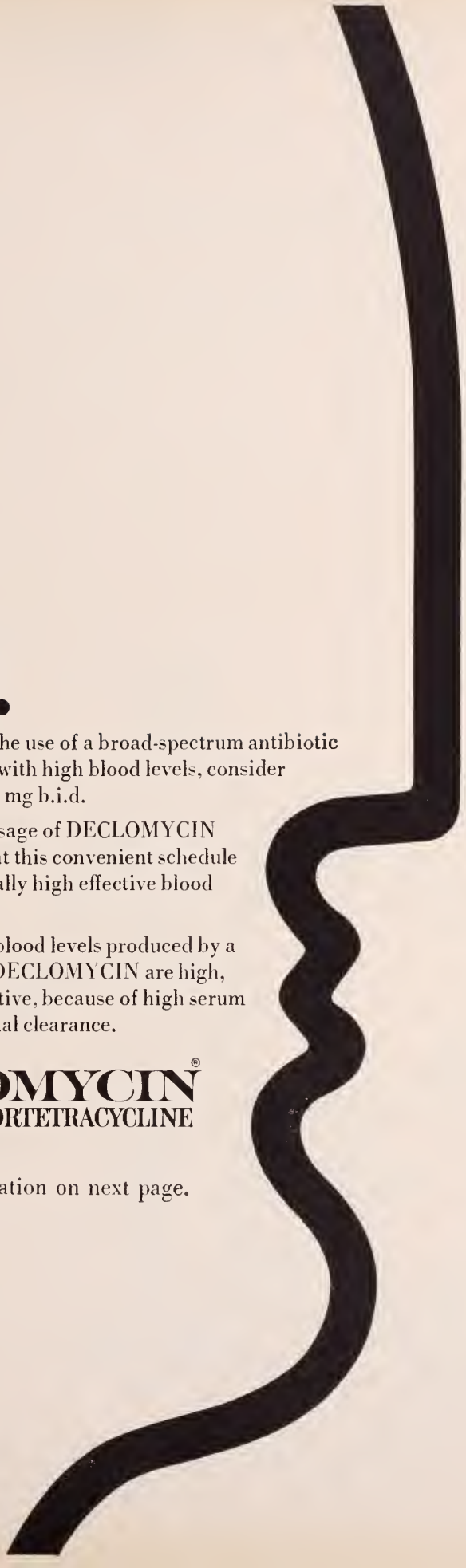
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Precautions—Overgrowth of nonsusceptible organisms may occur. Constant observation is essential. If new infections appear, appropriate measures should be taken. In infants, increased intracranial pressure with bulging fontanels has been observed. All signs and symptoms have disappeared rapidly upon cessation of treatment.

Side Effects—Gastrointestinal system—anorexia, nausea, vomiting, diarrhea, stomatitis, glossitis, enterocolitis, pruritus ani. Skin—maculopapular and erythematous rashes; a rare case of exfoliative dermatitis has been reported. Photosensitivity; onycholysis and discoloration of the nails (rare). Kidney—rise in BUN, apparently dose related. Transient increase in urinary output, sometimes accompanied by thirst (rare). Hypersensitivity reactions—urticaria, angioneurotic edema, anaphylaxis. Teeth—dental staining (yellow-brown) in children of mothers given this drug during the latter half of pregnancy, and in children given the drug during the neonatal period, infancy and early childhood. Enamel hypoplasia has been seen in a few children. If adverse reaction or idiosyncrasy occurs, discontinue medication and institute appropriate therapy.

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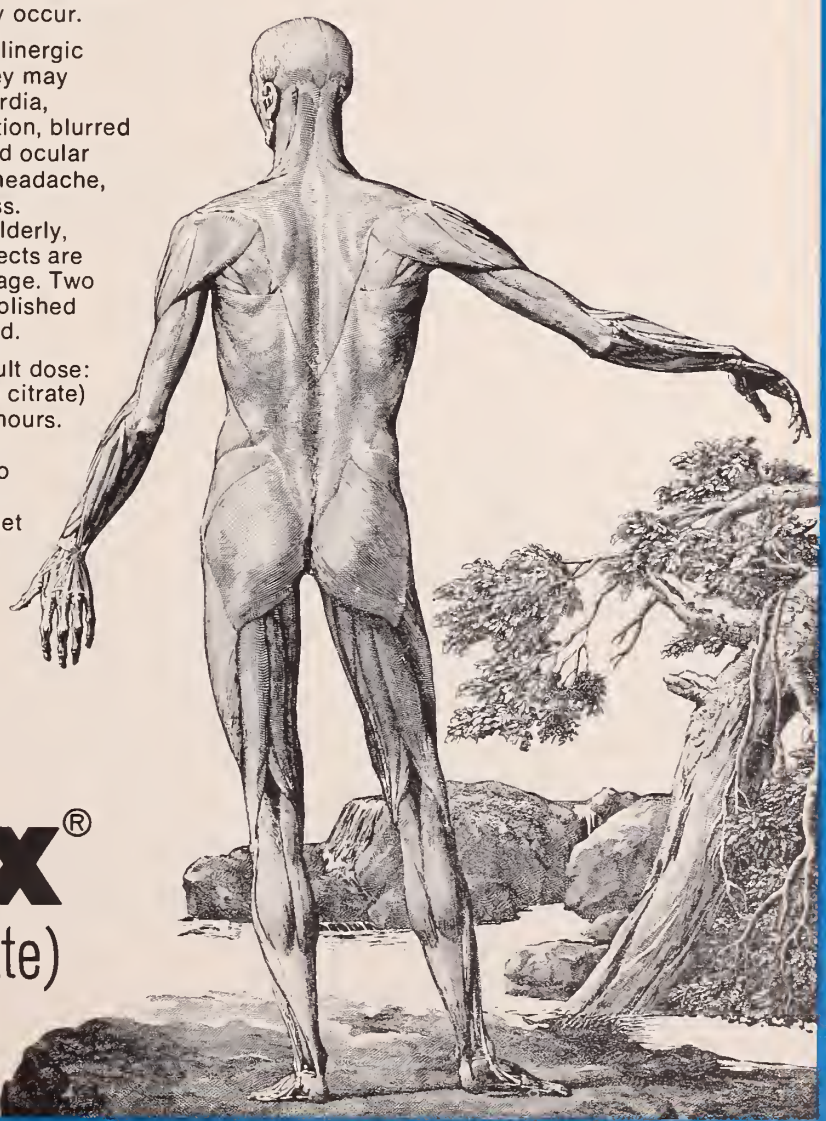
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MESSAGE FROM THE PRESIDENT



The Ethos of Medicine*

UNDOUBTEDLY, medicine in the small community is destined for great change. One could argue that medicine in small town areas is out of step with the times, that patients are deprived of some of the wonders of modern medicine. The computer age is breathing down the doctor's neck. His marvelously anachronistic fairyland will soon disappear and the loss will be grievous. Will his future patients fare better?

A recent president of the British Medical Association said, "The ethos of medicine is of no less significance than the science." A late dean of medicine often said, "Listen to what your patient has to say and he will tell you the diagnosis. Then tell the patient in words that he can understand, that you understood what he said." In such manner are desirable rapport and ethos of medicine developed.

In recent weeks one educator stated that professional training includes two important attributes, flexibility and dedication to purpose and that the latter is not a subject of formal training. He further stated that dedication comes from observation and emulation and is to be included in education by careful selection of medical students and faculty.

In former years educators concerned themselves primarily with core content, later with research and more recently with comprehensive medical care. Less than a decade ago certain educators welcomed a KMA statement advising that the primary function of medical centers is the teaching of students. Now their proposed plan of comprehensive medical care would control distribution and quality of medical practice and include the actual practice of medicine beyond the confines of the institution.

Medicare has brought many changes and the proposed amendments would bring more. The Commission on Health Manpower report reveals numerical need as well as quality and distribution needs. It recommends direct funding to education rather than through research, licensure changes and consideration of new health professionals. The report of the National Conference on Group Practice and AMA's recent meeting on socio-economics in Chicago also confirm the trend of increased changes of concept in medical practice.

In view of these anticipated changes we predict that the future patient will know how he feels but won't know what he's got while his doctor will know what he's got, but will have no conception of his feeling. Fascination with diseases will bring us to forget the bearer of that disease. The milk of human kindness will be curdled by molecular biology. No longer will the ethos of medicine have equal significance with the science.

J. SANKEY WILLIAMS, M.D.
KMA VICE-PRESIDENT, EASTERN DISTRICT

This is the third of a series of articles written at the request of KMA President George F. Brockman, M.D., by the three KMA vice-presidents and the president of the Woman's Auxiliary to KMA. The two previous articles appeared in the January and March issues of The Journal.

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Developed especially for toddlers

These new products were specifically developed to meet the needs of children graduating from baby foods. Combining convenience, texture and grown-up taste appeal with sound nutrition, Gerber research has created Toddler Meals in ten tasty varieties.

Superior nutrient/ calorie ratios

The nutritional characteristics of these casserole meals are excellent. High in critical nutrients, Gerber Toddler Meals are the answer to the problem of empty calories.

Excellent protein value

Gerber Toddler Meals contain 1½ to 3 times the high quality protein per calorie specified by the NRC Recommended Daily Dietary Allowance. Iron, thiamine, riboflavin, niacin and ascorbic acid also rate well above the Recommended Allowance per calorie for these nutrients.

New chewing satisfaction

Made with tender, bite-size morsels of meat, prepared by an exclusive Gerber process, they offer chewing satisfaction, yet are easily ingested and digested with light mastication.

Now when mothers ask your advice, consider this new step from baby foods to adult foods for assured nutrition.

Gerber Products Company, Fremont, Michigan 49412

PUBLIC HEALTH PAGE

The Kentucky Medical Laboratory Act†

RUSSELL E. TEAGUE, M.D., M.P.H.

Commissioner of Health
Commonwealth of Kentucky

THE 1968 General Assembly enacted legislation which becomes effective January 1, 1969, regulating the operation of medical laboratories. The Kentucky Medical Laboratory Act applies to all medical laboratories within the state of Kentucky except:

1. Medical laboratories operated by the United States Government
2. Medical laboratories operated by a licensed physician or a group of licensed physicians solely and exclusively in connection with the diagnosis and treatment of their own patients
3. Medical laboratories operated by hospitals licensed by the State Board of Health
4. Medical laboratories operated and maintained exclusively for research purposes involving no patient or public health service whatsoever

The State Board of Health is empowered to adopt rules and regulations to effectuate the purposes and provisions of the Act. Separate licensure of laboratory personnel is not required, but Board of Health regulations relating to qualifications of medical laboratory personnel will be adopted. The Board of Health will also promulgate regulations relating to the standards of performance in the examination of specimens, standards of constructions of medical laboratories and standards of medical laboratory equipment.

The license to operate a medical laboratory will be issued to the director of the laboratory. In order to qualify as a medical laboratory director, a person must be either: (1) a physician licensed to practice medicine in Kentucky, or (2) the holder of an earned doctoral degree with a chemical, physical or biological science as his major subject, who subsequent to graduation has had at least two (2) years of experience in the medical laboratory specialty for which he was trained. Tests performed in a laboratory directed by a non-physician must be limited to the specialties or sub-specialties of medical laboratory procedure for which the director is personally qualified, and no medical interpretation of test results, diagnosis, prognosis or suggested treatment can be made.

A performance evaluation testing program will be developed in which specimens for serologic, bacteriologic, biochemical, hematologic, and other examinations will be shipped periodically to participating laboratories. This type of program should promote greater standardization of laboratory procedures. Participation in the performance evaluation program will be a requirement for those medical laboratories covered by the Act, and it is expected that the performance evaluation program will be made available on a voluntary basis to physicians' laboratories not covered by the Act.

The Act also requires the approval from the Department of Health for the operation of a school for training medical laboratory personnel and/or medical laboratory trainees. Approval will be contingent upon presentation of satisfactory evidence that the curriculum, personnel and equipment of such school is adequate to provide quality training in medical laboratory techniques.

The Act provides for the appointment by the Commissioner of Health of an Advisory Committee to advise the Department in the fulfillment of its responsibilities under the Act. This Advisory Committee will be composed of nine (9) appointed members. The Commissioner of Health or his designated representative will be an ex officio member. The appointed members of the Committee will consist of five (5) members nominated by the Kentucky Medical Association. At least three (3) of these positions will be filled by pathologists who are directors of medical laboratories. Two (2) members will be nominated by the Kentucky State Society of Medical Technologists. One (1) member will be nominated by the Kentucky Hospital Association and one (1) member will be nominated by the Kentucky State Society of American Medical Technologists.

The development of the Kentucky Medical Laboratory Act was the result of the cooperative efforts of several individuals and professional organizations. Professional organizations contributing to the development of the Act and actively supporting the

(*Continued on Page 493*)

†*This article was prepared by B. F. Brown, M.D., M.P.H., Director, Division of Laboratory Services, Kentucky State Department of Health, 275 East Main Street, Frankfort, Kentucky 40601*

Abbott Antihypertensive Building Blocks

A simplified approach to the practical management of hypertension



Enduron: (methyclothiazide) A basic building block for mild hypertensives



Excellent day-long Na^+ output, yet easy on the K^+

Enduron provides an excellent starting therapy. Your patier sodium excretion is greatly enhanced. Yet potassium loss is lc

The therapeutic action is smooth, and persists for a full 24 hou With Enduron you can prescribe convenient once-a-day dos without skimping your patients on day-long thiazide effectivene

Of course, as with all thiazides, supplemental dietary potassi should also be considered.

Use Enduron as a basic therapy in patients with mild to m erate hypertension. A single 5-mg. tablet each day is ample most cases.

Once a day, every day

ENDURON

METHYCLOTHIAZIDE

MILD TO MODERATE TO SEVI



See Brief Summary on final page of advertisement

Enduronyl: Its deserpidine component adds response in moderate hypertension



Less frequent rauwolfia side effects than with reserpine

When you wish to build further response, consider shifting to Enduronyl.

Enduronyl adds a building block of *deserpidine*. This is a purified rauwolfia alkaloid available only from Abbott. It adds good antihypertensive and tranquilizing activity. Yet its incidence of untoward effects, particularly lethargy and depression, is lower than with reserpine.

Enduronyl is available plain or Forte. The latter provides its variation where most helpful, by doubling the deserpidine.

Use Enduronyl for patients throughout the broad range of mild to moderately severe hypertension.

MILD TO MODERATE TO SEVERE



)ce a day, every day

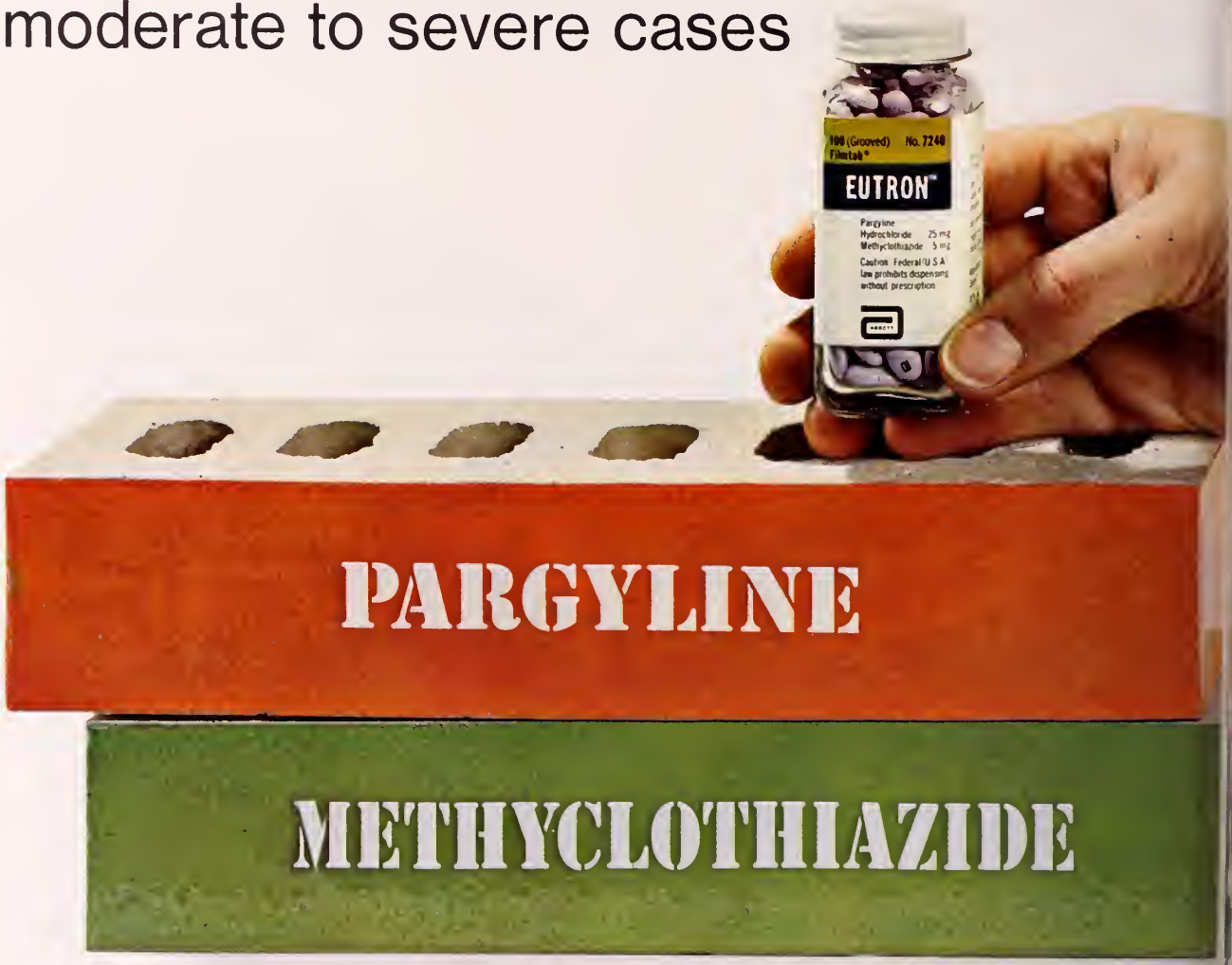
NDURONYL

METHYCLOTHIAZIDE 5 mg. with
DESERPIDINE 0.25 mg. or (FORTE) 0.5 mg.

See Brief Summary on final page of advertisement

801094

Eutron: A unique combination for handling moderate to severe cases



Affords almost uniform diastolic reduction in all body positions

Eutron lowers diastolic pressures nearly equally, whether yo patient is standing up or lying down.

Thus, in clinical trials, average *standing* diastolic readings we reduced from 112 pre-treatment to 90 post-treatment; *sitting* fr 115 to 95; and *recumbent* from 112 to 94.

Note that following Eutron, the diastolic reductions were nea alike in all three body positions.

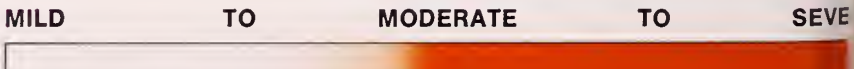
Use Eutron for managing your moderate to severe cases. building blocks enhance each other; hence lesser doses often suffi

Once a day, every day

EUTRON™

PARGYLINE HYDROCHLORIDE 25 mg.
with METHYCLOTHIAZIDE 5 mg.

MILD TO MODERATE TO SEVE



See Brief Summary on final page of advertisement

ENDURON® | ENDURONYL®

METHYCLOTHIAZIDE

Each tablet contains
Methyclothiazide 5 mg. with
Deserpidine 0.25 mg. or 0.5 mg.

Indications: Edema and mild to moderate hypertension (Enduron), and mild to moderately severe hypertension (Enduronyl). More potent agents, if added, can be given at reduced dosage.

Contraindications: Sensitivity to thiazides; severe renal disease (except nephrosis) or shutdown; severe hepatic disease or impending hepatic coma (hepatic coma due to hypokalemia has been reported in patients on thiazides). Do not use Enduronyl in severe mental depression, suicidal tendencies, active peptic ulcer, or ulcerative colitis.

Warnings: Consider possible sensitivity where there is history of allergy or asthma. If added potassium is indicated, dietary supplementation is recommended. Reserve enteric-coated potassium tablets for cautious use only when necessary, as they may induce serious or fatal small bowel lesions (stenosis with or without ulceration), cause obstruction, hemorrhage, and perforation often requiring surgery; discontinue them immediately if abdominal pain, distention, nausea, vomiting, or g.i. bleeding occurs. Neither Enduron nor Enduronyl contains added potassium.

Precautions: Use thiazides cautiously in severe renal dysfunction, impaired hepatic function or progressive liver disease; also in pregnancy (bone marrow depression, thrombocytopenia, and altered carbohydrate metabolism have been reported in certain newborn). In surgery, thiazides may reduce response to vasopressors, and increase response to tubocurarine. Antihypertensive response may be enhanced following sympathectomy. Watch for electrolyte imbalance (e.g., hyponatremia) in all patients. In hypokalemia (especially in digitalized patients) give supplemental potassium. In hypochloremic alkalosis, give supplemental chloride.

Use rauwolfias with caution in patients with history of peptic ulcer. Rauwolfias with anesthetics may produce hypotension and bradycardia. Discontinue Enduronyl two weeks before elective surgery. Consider vagal blocking agents during emergency surgery. In epilepsy, adjust anticonvulsant dosage. In electroshock, shorten stimulus strength and duration. In occasional patients with depressive tendencies, rauwolfias may precipitate severe mental depression that usually disappears when drug is stopped.

Adverse Reactions: Thiazide reaction include blood dyscrasias (thrombocytopenia with purpura, agranulocytosis, aplastic anemia); elevation of BUN, serum uric acid or blood sugar; anorexia, nausea, vomiting, diarrhea, headache, dizziness, paresthesia, weakness, skin rash, photosensitivity, jaundice, symtomatic gout, and pancreatitis. Cutaneous vasculitis in the elderly has been reported with other thiazides. Adverse effects with deserpidine are qualitatively similar to those with reserpine, but their incidence is lower. These include nasal stuffiness, abdominal cramps or diarrhea, nausea, headache, weight gain, reduced libido and potency, peptic ulcer aggravation, epistaxis, skin eruption, asthma in susceptible patients, electrolyte imbalance, excessive salivation, and a reversible Parkinson's syndrome. Excessive drowsiness, fatigue, weakness, and nightmares may signal mental depression. Thrombocytopenia, purpura, and a symptom manifested by dull sensorium, deafness, uveitis, glaucoma, and optic atrophy are rare allergic reactions to other rauwolfias. Hypotension from antihypertensive agents may precipitate angina attacks in susceptible individuals. Usually adverse reactions disappear when drug is withdrawn.

EUTRON™

Each tablet contains
Pargyline Hydrochloride 25 mg.
with Methyclothiazide 5 mg.

Indications—Moderate to severe hypertension.

Contraindications—Pheochromocytoma, paranoid schizophrenia, hyperthyroidism and advanced renal failure. Not recommended in malignant hypertension, children under 12, pregnant patients.

Do not use with: centrally or peripherally acting sympathomimetic drugs; foods high in tyramine (e.g., aged and natural cheeses); parenteral reserpine or guanethidine; imipramine, amitriptyline, desipramine, nortriptyline or their analogues; other monoamine oxidase inhibitors; methyldopa or dopamine; separate Eutron and these agents by two weeks.

Sensitivity to thiazides; severe renal disease (except nephrosis) or shutdown; severe hepatic disease; impending hepatic coma from thiazide-induced hypokalemia.

Warnings—Patients: 1. No other drugs (particularly "cold preparations" and antihistamines), cheese or alcohol without physician's consent. 2. Promptly report orthostatic symptoms, severe headache, other unusual symptoms. 3. Angina pectoris or coronary artery disease patients must not increase physical activity with improved anginal symptoms or well-being.

Physicians: 1. Use antihistamines, hypnotics, sedatives, tranquilizers and narcotics (meperidine contraindicated) cautiously in reduced doses. 2. Stop Eutron two or more weeks before elective surgery; in emergency surgery reduce premedication (narcotics, sedatives, analgesics, etc.) to 1/4 to 1/5; carefully adjust anesthetic dosage to patient response. 3. Use cautiously in advanced renal failure. 4. Pargyline may induce hypoglycemia. 5. Consider possible sensitivity reactions when a history of allergy or asthma is present. 6. If potassium is indicated, dietary supplement is recommended; enteric-coated potassium tablets may induce serious or fatal small bowel lesions (stenosis with or without ulceration), cause obstruction, hemorrhage, and perforation frequently requiring surgery; discontinue medication immediately if abdominal pain, distention, nausea, vomiting or gastrointestinal bleeding occurs; Eutron does not contain added potassium. 7. Possible systemic lupus erythematosus has been reported for thiazides.

Precautions—Pargyline: Use cautiously at reduced dosage: caffeine, alcohol, antihistamines, barbiturates, chloral hydrate, other hypnotics, sedatives, tranquilizers, narcotics. Periodically do urinalyses, blood counts, liver function tests, etc. Use with caution in liver disease. Watch for orthostatic hypotension, especially in impaired circulation (e.g., angina pectoris, coronary artery disease, cerebral arteriosclerosis); also, augmented hypotension in concomitant febrile illnesses. Reduce or discontinue if hypotension is severe. In impaired renal function watch for cumulative drug effects, elevated BUN and other evidence of progressive renal failure; withdraw drug if these persist. In surgery increased central depressant response (hypotension and increased sedative effect) can be controlled by (1) discontinuing at least two weeks prior; (2) in emergency surgery lowering dose of premedication; (3) when necessary, administering a vasopressor. Do not use in hyperactive and hyperexcitable patients. Pargyline may unmask severe psychotic symptoms where emotional problems pre-exist. Use cautiously in Parkinsonism, especially with antiparkinsonian agents. In prolonged therapy, examine for change in color perception, visual fields, fundi and visual acuity. Also, prolonged therapy has made certain patients refractory to nerve blocking effects of local anesthetics.

Methyclothiazide: Use cautiously in severe renal dysfunction, impaired hepatic function or progressive liver disease; also in pregnancy (bone marrow depression, thrombocytopenia, and altered carbohydrate metabolism have been reported in certain newborn). In surgery thiazide may reduce vasopressor response and increase tubocurarine response. Antihypertensive response may be enhanced following sympathectomy. Watch for electrolyte imbalance (e.g., hyponatremia). Give supplemental chloride if hypochloremic alkalosis occurs and supplemental potassium if hypokalemia occurs (especially in digitalized patients). Thiazides may decrease serum P.B.I. without signs of thyroid disturbance.

Adverse Reactions — Pargyline: Orthostatic hypotension and associated symptoms, mild constipation, fluid retention, edema, dry mouth, sweating, increased appetite, arthralgia, nausea, vomiting, headache, insomnia, difficult in micturition, nightmares, impotence, delayed ejaculation, rash, purpura, weight gain, hyperexcitability, increased neuromuscular activity and other extrapyramidal symptoms. Drug fever is extremely rare. Reduction in blood sugar and hypoglycemic effects are possible. Congestive heart failure has been reported in a few patients with reduced cardiac reserve.

Methyclothiazide: Blood dyscrasias (thrombocytopenia with purpura, agranulocytosis, aplastic anemia); elevation of BUN, blood sugar or serum uric acid (gout may be induced); anorexia, nausea, vomiting, diarrhea, headache, dizziness, paresthesia, weakness, skin rash, photosensitivity, jaundice and pancreatitis. Cutaneous vasculitis in elderly patients has been reported with other thiazides.

If side effects are severe or persist, reduce dosage or withdraw drug. 804439R

ABBOTT

TM-TRADEMARK



Blue Shield Answers Your Questions About "CHAMPUS"

Q. What does CHAMPUS stand for?

A. CHAMPUS is an abbreviation for the Civilian Health And Medical Program of the Uniformed Services.

Q. Who is eligible for CHAMPUS benefits?

A.
1. *The wife of an active duty, retired or deceased service-member of the uniformed services.*
2. *Unmarried dependent children, including adopted or stepchildren of active duty, retired or deceased members of the uniformed services, who have not passed their twenty-first birthday.*
3. *Children who have passed their twenty-first birthday but who are incapable of self-support because of mental or physical incapacity that existed before their twenty-first birthdate; or children who have not passed their twenty-third birthdate and are enrolled in an institution of higher learning.*
4. *Retired service members.*

Q. Who is responsible for issuing identification cards to CHAMPUS beneficiaries; for advising them of (1) the benefits for which they are eligible and (2) the necessity of properly identifying themselves on the initial visit to any physician?

A. The government or appropriate military facility.

Q. Is there a special claim form which physicians should use to report authorized services rendered CHAMPUS beneficiaries?

A. Yes. The buff (yellow) colored DA Form 1863-2, revised June 1967 should now be used by all physicians. (DA Form 1863-2, revised September 1, 1961 is now obsolete and should be discarded.) For a supply of new forms contact: CHAMPUS FISCAL AGENT, Kentucky Physicians Mutual, Inc., 3101 Bardstown Road, Louisville, Kentucky 40205.

Q. What are some authorized benefits under the CHAMPUS Program?

A.
1. *In-patient and out-patient treatment for medical and surgical conditions, mental disorders, chronic conditions and contagious diseases*
2. *RX drugs*
3. *Complete obstetrical care*
4. *Rental of durable equipment*
5. *Ambulance service*

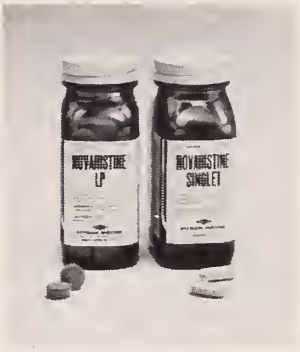
Q. Will all authorized physician's services be paid in full by the government?

A. No. Payment is made on a cost sharing basis by the patient and the government. Detailed information is provided on the reverse side of the Revised DA Form 1863-2 regarding the patient's and the government's liabilities. The sum of the patient's liability and the government's allowance constitutes payment in full.

Some U.R.I. patients are more miserable than others.

That's why we make Novahistine® tablets in two different formulations.

And let you control the dosage.



Each Novahistine LP tablet contains phenylephrine hydrochloride, 25 mg.; and chlorpheniramine maleate, 4 mg.
Each Novahistine Singlet tablet contains phenylephrine hydrochloride, 40 mg.; chlorpheniramine maleate, 8 mg.; and acetaminophen, 500 mg.

With Novahistine LP tablets and Novahistine Singlet™ tablets you have the range and flexibility of decongestant dosage that lets you prescribe for the needs of the individual patient.

Novahistine LP tablets are most useful for relief of nasal congestion in patients without pain or fever. Novahistine Singlet tablets, which provide analgesic-antipyretic effect, as well as decongestant action, are indicated for upper respiratory infections accompanied by pain, aches and fever.

Whether you prescribe Novahistine LP or Novahistine Singlet, a total daily dose of 3 or 4 tablets will usually provide effective, continuous relief.

Use cautiously in patients with severe hypertension, diabetes mellitus, hyperthyroidism or urinary retention. Caution ambulatory patients that drowsiness may result.

DOW PITMAN-MOORE DIVISION OF THE DOW CHEMICAL COMPANY, INDIANAPOLIS



"Nothing else I've tried seems to work, so I decided to give you a crack at it."

From the files of the

COMMITTEE FOR THE

STUDY OF MATERNAL MORTALITY

CASE 11-66. A 42 year old, married, white gravida 7, para 6 was under the care of a private physician. Her expected date of delivery as calculated from her menstrual history was February, 1966. She was seen initially in the sixth month of the current pregnancy. The findings at five prenatal visits were as follows:

Month of Pregnancy	6	7	8	9 1	2	3	4
Blood pressure	132/80	136/80	132/76		140/80		
Weight	127	132	134	137	137		
Urine	Neg	Neg	2+ alb.	1+ alb.	1+ alb.		

Hematocrit 78% VDRL Non-Reactive

She was admitted to the hospital at 11:20 A.M. on February 6, 1966 having uterine contractions at 10 to 15 minute intervals. She weighed 141 pounds, and her blood pressure was 128/90. The fetal heart beat was of good quality. The cervix was soft, and 4 cm dilated. Soon after admission, the contractions became stronger, and the patient was sedated with 100 mg Demerol and given 1/150 gr of scopolamine at 2:50 P.M., when the cervix was 5 cm dilated. At 3:45 P.M. she was having hard contractions and the cervix had dilated to 8 cm. At 4:04 P.M., under Trilene analgesia she was delivered spontaneously from ROA position of a female infant who weighed 7 pounds. The placenta was expressed intact after spontaneous separation. There was no episiotomy or laceration. She received 1 cc of methergine intramuscularly. Her blood pressure was 150/90 at 4:00 P.M.

Approximately 30 minutes postpartum, after the patient had been returned to her room, she had a moderately severe vaginal hemorrhage. Methergine was given intravenously immediately and a dilute intravenous pitocin infusion was started. Blood was requested for transfusion. The blood pressure was now 80/60; nevertheless she was described as appearing to be in satisfactory condition.

Her physician was in the hospital and was called to the bedside. He found the uterus to be somewhat distended, soft and boggy, and thought that this uterine atony was the cause of the bleeding. During the next one hour and a half a blood transfusion was started, and uterine massage was continued. It was noted that the uterus did not contract normally, and that each time the massage was stopped the uterus became flabby, atonic and distended with blood. Surgical consultation was obtained at 6:00 P.M., by which time a second pitocin infusion had been started and the patient was receiving her third pint of blood. Manual compression of the uterus by bimanual pressure within the vagina was attempted together with external pressure over the abdomen. Despite these measures the bleeding could not be controlled. Further vaginal examination showed a small tear in the left side of the lower uterine segment approximately two inches above the cervical os. The blood pressure was now 90/50.

The consultant recommended immediate transfer to the operating room. By now, the patient was disoriented and restless, and showed air hunger. Her condition was so precarious she was not moved onto the operating table, but was operated on on the cart without anesthesia at 7:20 P.M. Cutdowns were made in the legs and blood was pumped in. The abdomen was hurriedly opened and the broad ligaments were clamped and severed. Clamps were then placed on the uterine arteries and the cardinal ligaments down to the cervix. Some blood was seen in the left parametrium from the tear in the left side of the lower uterine segment. Pressure on the aorta was used to control the bleeding. The patient had no vital signs in spite of copious transfusion under pressure. The procedure was completed even though the patient had died, and the abdomen was closed. Examination of the removed uterus showed the previously described tear in the left lower uterine segment approximately two inches above the cervical os. The final diagnosis was massive uterine hemorrhage from rupture of the left lower uterine segment.

Comments

This case was classified as a direct obstetrical death with preventable factors on the part of the physician. From the information supplied it could not be determined whether or not the cervix had been checked for a laceration following the delivery of this high risk patient. The Committee thought that if the patient had been returned to the delivery room and examined as soon as it was apparent that the uterine bleeding was not under control by intravenous oxytocin infusion, the all important three hours' lapse might have been significantly shortened. This might possibly have resulted in earlier diagnosis of the uterine rupture, and prompt operation might have saved the patient's life.

When the talk turns to oral contraceptives, it makes medical sense to remember low-dose Norinyl®-1.

(norethindrone 1mg. & mestranol 0.05mg.)

Turn page for contraindications, precautions and side effects.



Reduction of oral contraceptive dosage to the lowest effective levels is a well-accepted principle of conservative medical practice. In keeping with this view, Norinyl is now also available as Norinyl-1, containing exactly one half the previous dosage of norethindrone and mestranol. Clinical experience has established that effective fertility control can be achieved with the same degree of reliability and safety with new Norinyl-1 when taken as directed.

What about switching patients from higher dosage forms?

In transferring patients to low-dose Norinyl-1 from higher-dosage oral contraceptives, some breakthrough bleeding may occur in the early cycles. In the majority of cases the bleeding episode is mild and self-limited. The long-term advantages of the lower dosage form should be weighed against the inconvenience of possible breakthrough bleeding in the individual patient.

Contraindications: 1. Patients with thrombophlebitis or with a history of thrombophlebitis or pulmonary embolism. 2. Liver dysfunction or disease. 3. Patients with known or suspected carcinoma of the breast or genital organs. 4. Undiagnosed vaginal bleeding.

Warnings: 1. Discontinue medication pending examination if there is sudden partial or complete loss of vision or if there is a sudden onset of proptosis, diplopia or migraine. If examination reveals papilledema or retinal vascular lesions, medication should be withdrawn. 2. Since the safety of NORINYL-1 (norethindrone 1 mg. with mestranol 0.05 mg.) in pregnancy has not been demonstrated, it is recommended that for any patient who has missed two consecutive periods, pregnancy should be ruled out before continuing the contraceptive regimen. If the patient has not adhered to the prescribed schedule, the possibility of pregnancy should be considered at the time of the first missed period. 3. Detectable amounts of the active ingredients in oral contraceptives have been identified in the milk of mothers receiving these drugs. The significance of this dose to the infant has not been determined.

Precautions: 1. The pretreatment physical examination should include special reference to breast and pelvic organs, as well as a Papanicolaou smear. 2. Endocrine and possibly liver function tests may be affected by treatment with NORINYL-1. Therefore, if such tests are abnormal in a patient taking NORINYL-1 it is recommended that they be repeated after the drug has been withdrawn for two months. 3. Under the influence of estrogen-progestogen preparations, preexisting uterine fibromyomata may increase in size. 4. Because these agents may cause some degree of fluid retention, conditions that may be influenced by this factor, such as epilepsy, migraine, asthma, cardiac or renal dysfunction, require careful observation. 5. NORINYL-1 should be used with caution in patients with a history of cerebrovascular accident. 6. In relation to breakthrough bleeding, and as in all cases of irregular bleeding *per vaginam*, nonfunctional causes should be borne in mind. In cases of undiagnosed vaginal bleeding, adequate diagnostic measures are indicated. 7. Patients with a history of psychic depression should be carefully observed and the drug discontinued if the depression recurs to a serious degree. 8. Any possible influence of prolonged NORINYL-1 therapy on pituitary, ovarian, adrenal, hepatic or uterine function awaits further study. 9. A decrease in glucose tolerance has been observed in a small percentage of patients on oral contraceptives. The mechanism of this decrease is obscure. For this reason, diabetic patients should be carefully observed while receiving NORINYL-1 therapy. 10. Because of the occasional occurrence of thrombophlebitis and pulmonary embolism in patients taking oral contraceptives, the physician should be alert to the earliest manifestations of the disease. 11. Because of the effects of estrogens on epiphyseal closure, NORINYL-1 should be used judiciously in young patients in whom bone growth is not complete. 12. Th age of the patient constitutes no absolute limiting factor, although treatment with NORINYL-1 may mask the onset of the climacteric. 13. The pathologist should be advised of NORINYL-1 therapy when relevant specimens are submitted.

Side effects observed in patients receiving oral contraceptives: The following adverse reactions have been observed in patients receiving oral contraceptives: nausea, vomiting, gastrointestinal symptoms (su as abdominal cramps and bloating breakthrough bleeding, spotting, change in menstrual flow, amenorrhea, edema, chloasma or melasma breast changes (tenderness, enlargment and secretion), change in we (increase or decrease), changes in cervical erosion and cervical secret suppression of lactation when giv immediately postpartum, cholesta jaundice, migraine, rash (allergic) rise in blood pressure in susceptib individuals, mental depression.

Although the following side effect have been reported in users of ora contraceptives, no cause and effec relationship has been established. anovulation post-treatment, premenstrual-like syndrome, char in libido, changes in appetite, cyst like syndrome, headache, nervous dizziness, fatigue, backache, hirsutism, loss of scalp hair, erythema multiforme, erythema n sum, hemorrhagic eruption, itch

The following occurrences have b observed in users of oral contrace tives (a cause and effect relations has been neither established nor proved): thrombophlebitis, pulm embolism, neuro-ocular lesions.

The following laboratory results may be altered by the use of oral contraceptives: increased sulfobromophthalein and other hepat function tests, coagulation tests (increase in prothrombin, Factor VII, VIII, IX and X), thyroid fun tion (increase in PBI and butano extractable protein-bound iodine decrease in T^3 values), metyrapo test, pregnanediol determinatio

norethindrone — an original steroid from

SYNTEX

LABORATORIES INC., PALO ALTO, CALIF

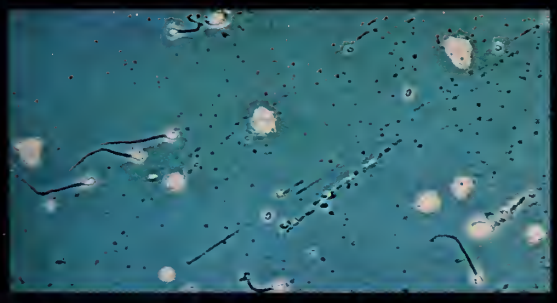
Here's why Norinyl-1 makes medical sense.

The effectiveness of Norinyl-1 as a low-dose oral contraceptive may be explained by its possible multiple action. In addition to its primary action of suppression of ovulation, Norinyl-1 may offer additional protective mechanisms... (1) creation of a cervical mucus that may be hostile to sperm penetration, and (2) development of an endometrium that may be out of phase with nidation. These effects are illustrated below.

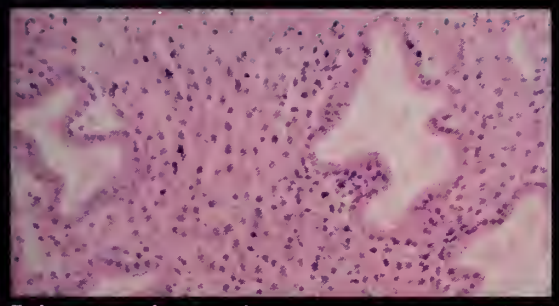
Untreated Patient



Cervical mucus at midcycle is usually thin and watery, with Spinnbarkeit (stretchability) of 15 to 20 cm.



Spermatozoa appear healthy, active, freemoving.

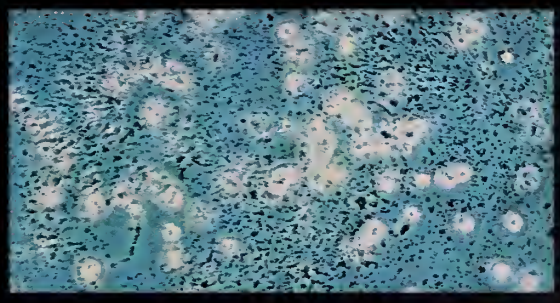


Endometrium of untreated patient is receptive to the fertilized ovum during secretory phase.

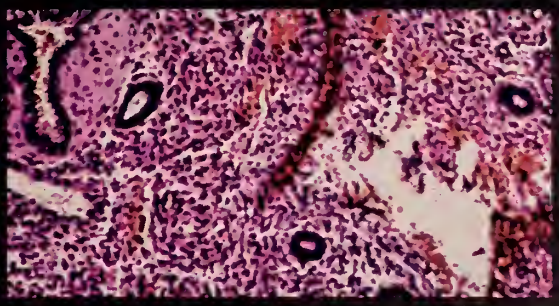
Norinyl-1 Patient



Cervical mucus at midcycle is scanty, viscous—with Spinnbarkeit of 1 cm. or less.



Immobile spermatozoa as they appear in cervical mucus taken from patient treated with Norinyl-1.



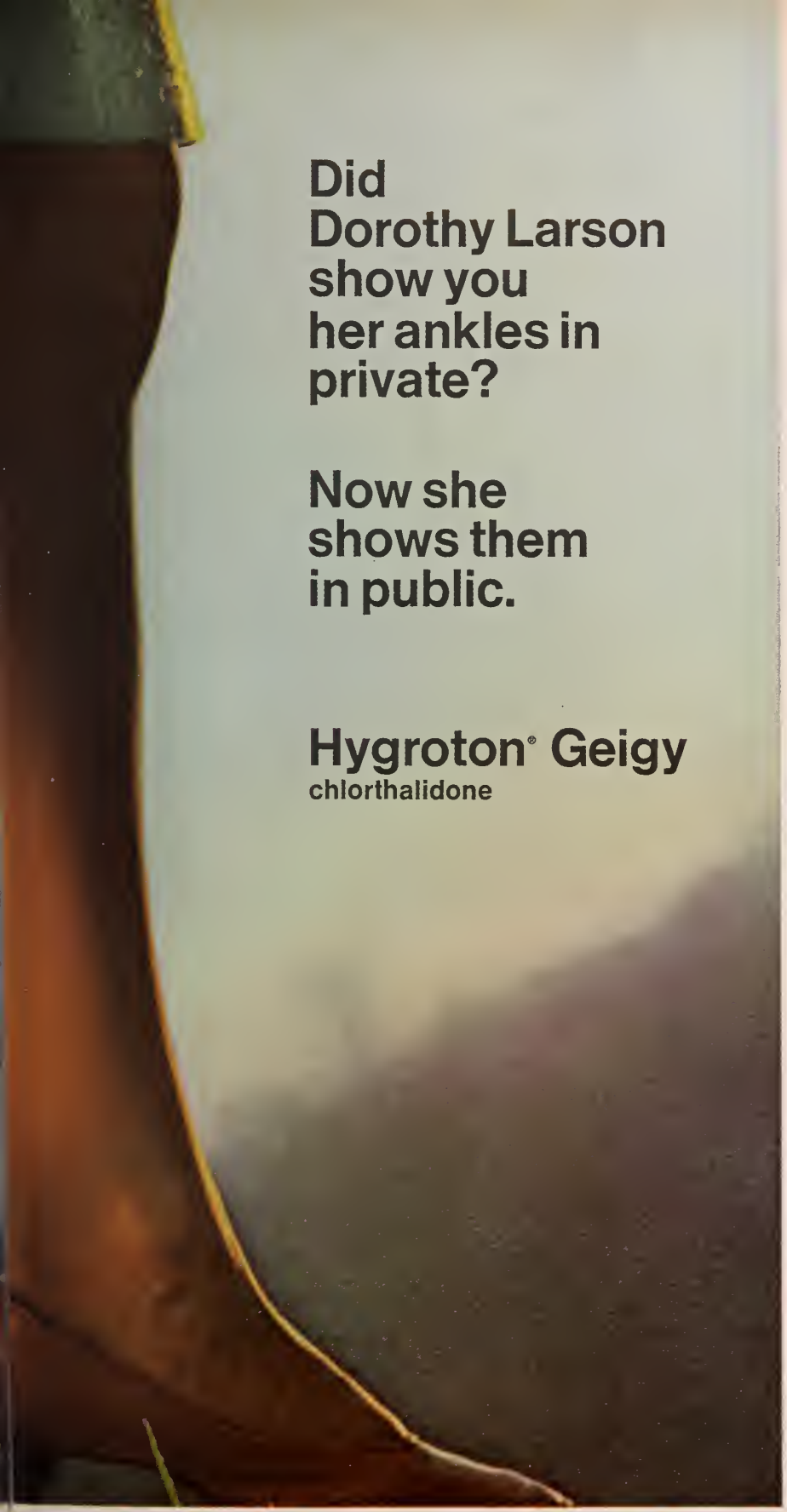
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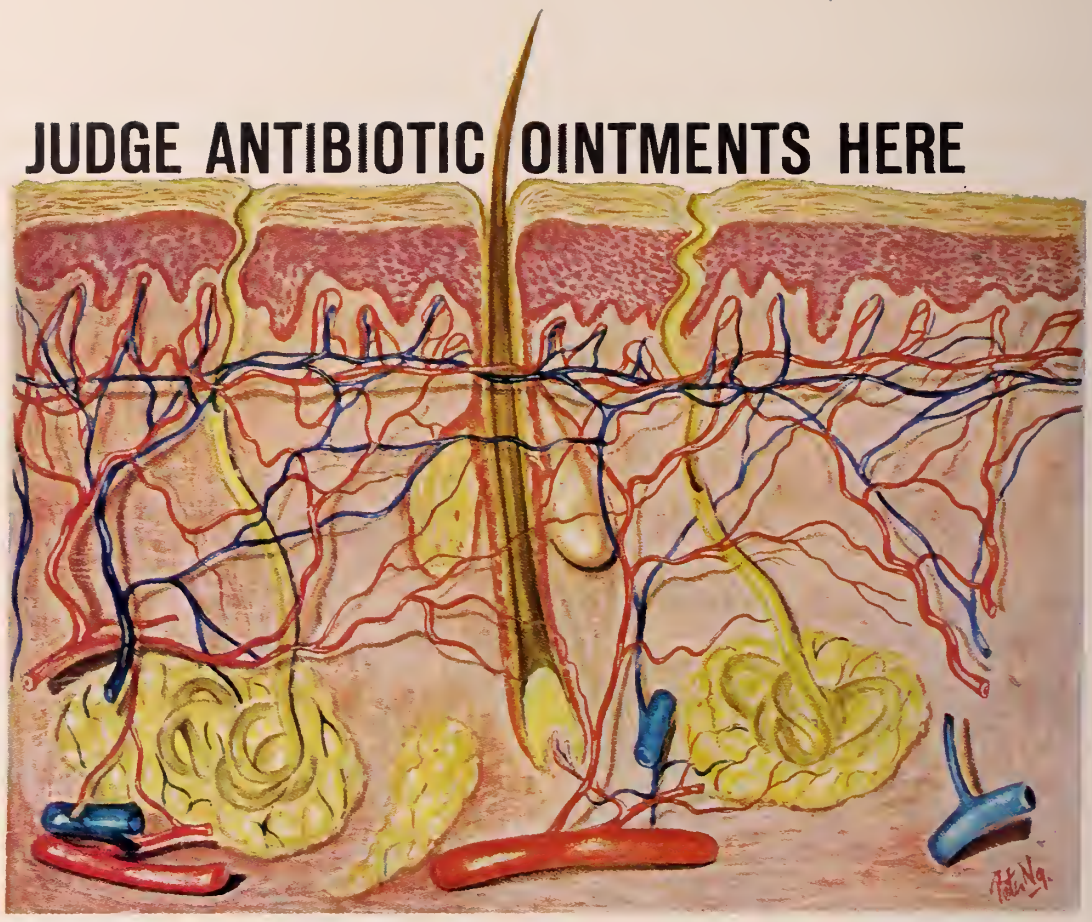
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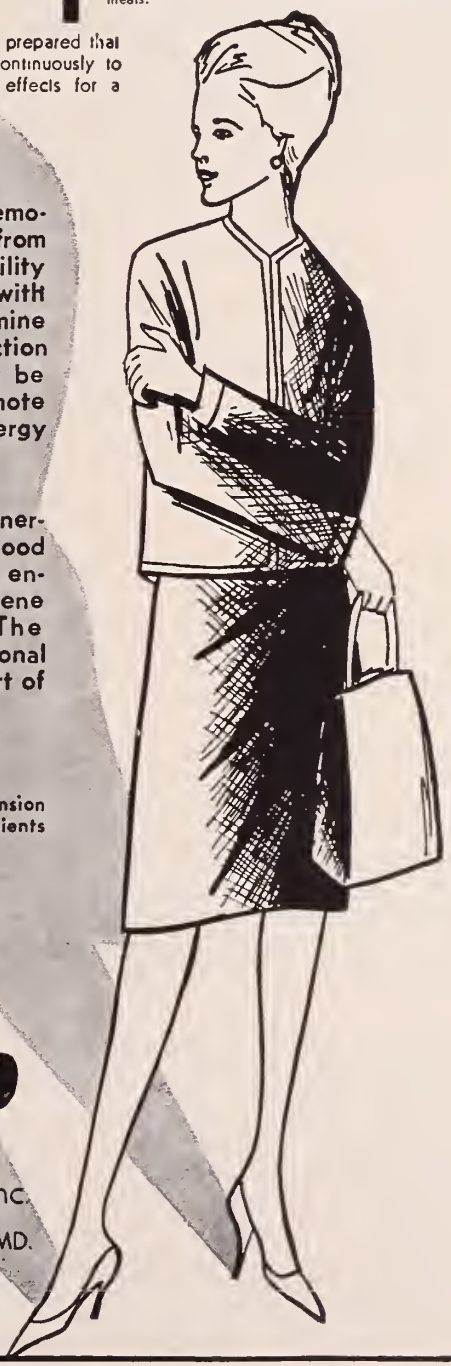
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SYNOPSIS OF GYNECOLOGY (Seventh Edition): by Daniel W. Beacham, M.D., and Woodard D. Beacham, M.D.; Published by the C. V. Mosby Company, St. Louis, 1967; 384 Pages; Price $8.50.

This popular synopsis is replete with information. The Doctors Beacham have continued the authorship which was started in 1932 by the late Harry Sturgeon Crossen, M.D.

The longest and perhaps most valuable chapter deals with the gynecological examination. Here many points are covered and in a more thorough manner than in the standard textbooks. A non-gynecologist may stray during the rather lengthy discussion of menstrual physiology, but this poorly understood phenomenon still commands great interest by the gynecologist.

The differential diagnosis of ovarian neoplasms is presented in a series of excellent illustrations. All who do pelvic examinations will be confronted with this vexing problem.

Complications of pregnancy, including septic shock, are adequately discussed. It is well to see the authors state quite clearly that hormone therapy is not indicated for the majority of patients who are threatening abortion. Rarely do these women benefit from hormones because most abortions are due to defective germ plasm.

Contraception is discussed in a manner that should enlighten those who seek more objective information than that provided by the manufacturers.

Malignant disease perhaps should be accorded more space for surely its importance is unquestioned by all. If a reader desires extensive information he must rely on the more complete textbooks. Of course a synopsis is a condensation and the authors have succinctly covered the entire subject in an admirable fashion. The esoteric debates are omitted.

This book will serve its purpose to those who seek an up-to-date but short review of gynecology.

CECIL L. GRUMBLES, M.D.

DIAGNOSTIC PROCEDURES IN GASTROENTEROLOGY: edited by Charles H. Brown, M.D.; Published by the C. V. Mosby Company, St. Louis, 1967; 438 Pages; Price $19.75.

With the more recent addition of numerous diagnostic procedures in the practice of gastroenterology, a book of this nature has been sorely needed. In addition to the usual clinical workups and radiological examinations, a practicing gastroenterologist is expected now to utilize many other procedures. Some of these can be performed by himself and others by his colleagues trained in other specialties. Proper selection of diagnostic procedures and careful consultation with others, therefore, are paramount in reaching a definitive diagnosis.

As stated in the preface by the editor, this book originated as a manual designed primarily for the benefits of fellows in gastroenterology in the Cleveland Clinic. As true with most books with all or most of the authors from one single institution, local flavor and dogma are present in this book.

This book contains all the useful and necessary diagnostic procedures in the clinical practice of gastroenterology. In addition, helpful nurse's notes and instructions to patients as well as various dietary regimens are included for easy and often-needed reference.

Simplicity is, indeed, the virtue as well as the fault of this book. In some areas important information seems to be lacking. One may cite the example of the chapter on gastric secretion where some of the normal values are not included.

Some of the diagnostic tests presented in this book give the impression that they are of unquestionable value and accuracy for the particular disease under discussion. However, after careful scrutiny of the experiences of others, one may find the given impression not to be absolutely true.

This book is comfortable to read and easy to follow. It is magnificently illustrated with simple diagrams and beautifully reproduced x-ray plates and color photographs.

This reviewer has found this book to be extremely useful. It should prove to be a very much needed reference for the gastroenterologist as well as the practicing physician who deals with a large number of patients with gastrointestinal problems. This book, therefore, is highly recommended.

SAMUEL H. CHENG, M.D.

WOMEN BEHIND MEN IN MEDICINE: by Josephine Rich; Published by Julian Messner, New York, 1967; 190 Pages; Price $3.50.

This book, one of a series of biographies of famous doctors intended for junior and senior high school students, was written by the wife of a Lexington physician. It is the third such biography which Mrs. Rich has written in the series. The 12 women range from the twelfth century woman physician, Trocula of Salerno, to Martha Bernays Freud, the wife of Sigmund Freud, and include the first wife of a doctor in the new world and (of particular local interest) sketches on Jane Todd Crawford and Sarah Shelby McDowell of ovariotomy fame.

Mrs. Rich has very cleverly selected particular incidents in the lives of these women on which to

build her sketches. For instance, the sketch on Troctula of Salerno describes a day in the life of this medieval woman who was supposedly not only the wife and the mother of a physician, but a physician herself. The sketch of Agnes Home Hunter, wife of John Hunter, M.D., begins with their eccentric marriage at 8 A.M. on a Sunday.

Mrs. Rich gives her source material in a bibliography of books and periodical articles and from these citations it is obvious that her research was done from purely secondary tools. Too quick a reading of these sources has resulted in some inaccuracies. Mrs. Rich notes that Anne Manzolini was "the first to discover and record a correct medical description of a certain muscle of the eye *which is named for her.* (p. 38); yet a contemporary historian is cited as saying "that Anne Manzolini discovered the correct termination of the oblique muscle of the eye, *which might very well have been named for her.*" (Mead, A History of Women in Medicine p. 509).

Far more serious is Mrs. Rich's misleading sketch of Troctula. The existence of such a person has been questioned by historians and indeed this has raged as a topic of great contention among scholars. Major historians such as Singer and Garrison ignore her existence completely, believing that the name Troctula was merely a generic term perhaps applied to midwives. Others, such as Doctor Campbell Hurd-Mead, argue that such a woman may have existed, but Castiglioni, the Italian historian, merely cites the controversy and the argument of the historians on each side.

The medical work of the husbands of these famous women is described accurately; in fact in many instances the major portion of the sketch is given over to their work with little attention to the women themselves. In the sketch of Marian Shaw Bell, the wife of Charles Bell, M.D., all but the last page and a half of the 14-page sketch is devoted to the period he spent in London before they were married.

The women immerge as vague and unfortunately stereotyped figures, characterized by similar attributes. For Ann Hunter helped "by being present to smooth the constant annoyances and irritations," (page 60), while Marian Bell brought "confidence and courage," and Teresa Sims had a "lifetime habit of guarding her husband's health." (p. 121). Mary Livingston kept David Livingston in proper balance," (p. 134), and Grace Osler kept Doctor Osler "healthy with proper food . . . and guarded his writing hours from interruptions," (p. 149).

The central topic of the book, the women, fall victim to Mrs. Rich's more interesting stage settings and her descriptions of the exciting work of the physicians. The book will do more to inspire interest in medicine as a career than an appreciation for the varied women as individuals who did, no doubt, soothe, comfort, and guard their husbands.

JOAN TITLEY



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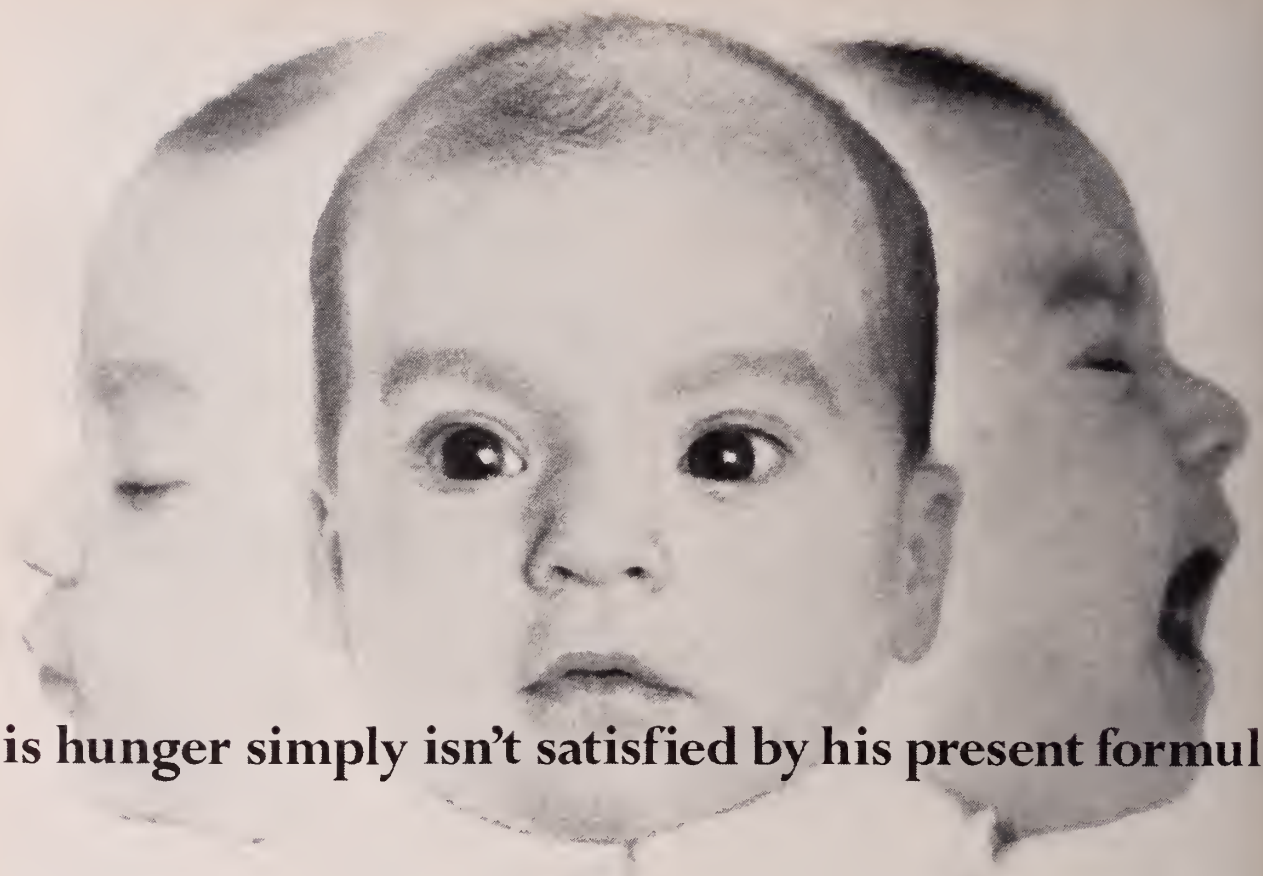
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in stooling

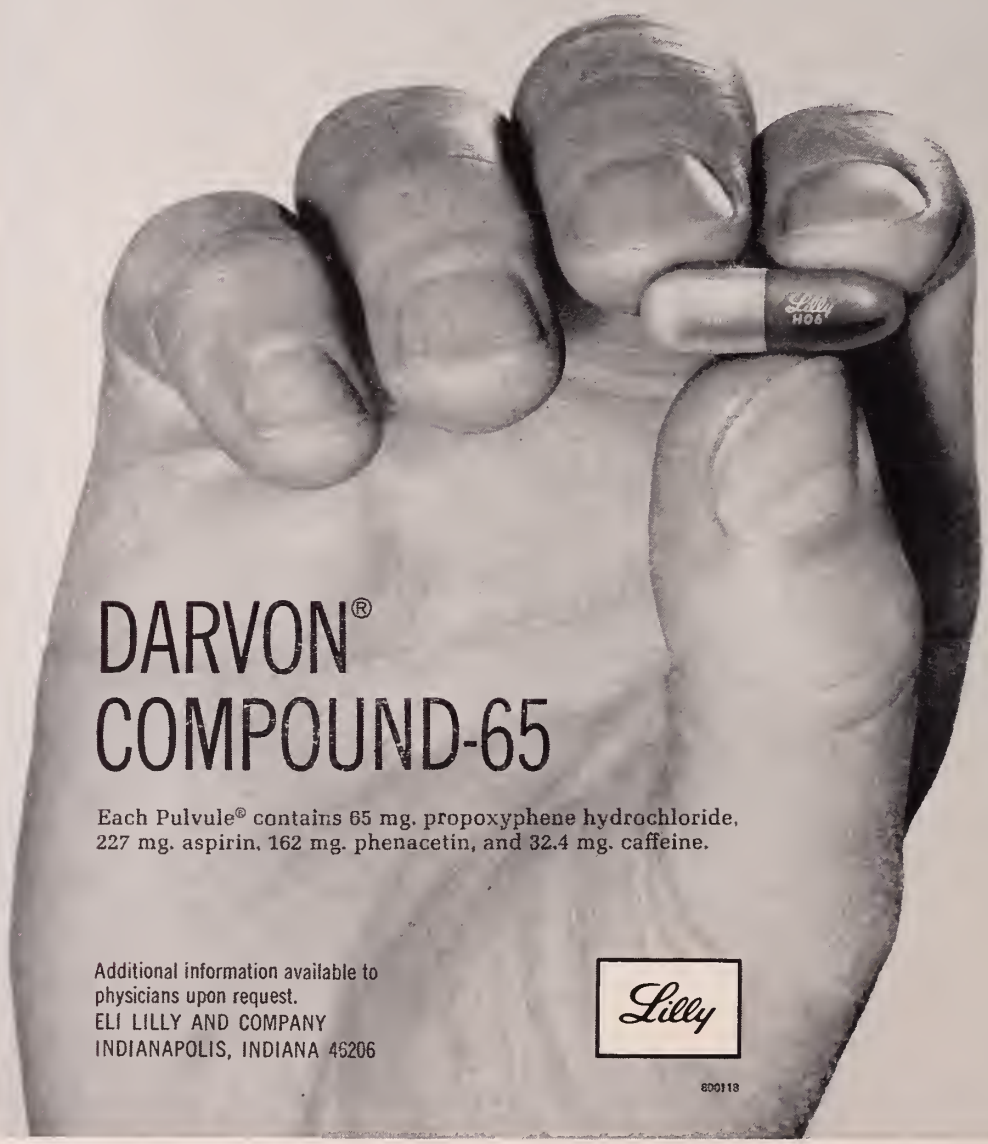
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VOLUME 66 MAY 1968 No. 5

An Analysis of 993 Patients With Cerebral Palsy

J. KENNETH EAKINS, M.D.* AND
MARGARET A. LIMPER, M.D.**

Louisville, Kentucky

Nine hundred ninety-three patients with cerebral palsy are receiving care through the Commission for Handicapped Children. Their charts have been analyzed and information regarding etiology, diagnosis, classification and presence of associated handicaps is presented.

CEREBRAL palsy is one of the most common crippling disorders of children. In order to provide care for medically indigent children afflicted with this disorder, the Commission for Handicapped Children conducts cerebral palsy clinics in Ashland, Covington, Lexington, Louisville and Paducah. Children admitted to these clinics have a thorough evaluation including a detailed medical and developmental history, psychological testing, pediatric examination and a neurologic-orthopedic examination. A review has been made of the medical records of these patients. Because of the large number of patients involved, it is felt that the information gained through the review has unique value and should be reported.

Findings of Review

According to Perlstein, cerebral palsy "comprises a group of clinical syndromes characterized by chronic motor dysfunction, whether paralysis, weakness, incoordination, involuntary motion or any other aberration of movement, due to involvement of the motor control areas of the brain".[1] Accepting this definition, but eliminating, as is customarily done, children with hereditary and/or progressive disorders, it was found that 1,111 patients with cerebral palsy were receiving care in Commission clinics as of January 1, 1966. In 118 of these patients, however, the diagnosis of acquired cerebral palsy had been established. This category was comprised of patients who had been normal, healthy children until they suffered a cerebral insult, usually trauma or infection, which left them with cerebral palsy. The other 993 patients form the basis of this report. The majority of these were enrolled in a cerebral palsy clinic but some, usually those with a minimal handicap, were being seen in general orthopedic clinics.

TABLE I

RACE AND SEX

	No. of Patients
Male	551
Female	442
Caucasian	880
Negro	113

Fifty-five percent of the patients were boys. This finding agrees with the frequently made observation that cerebral palsy is more common in males.[2] Negro children made up 13% of the total. This is slightly below the percentage of Negroes in the over-all Commission patient population.

*Pediatric consultant, Commission for Handicapped Children, Louisville

**Medical Director, Commission for Handicapped Children, Louisville

TABLE II

MONTH OF BIRTH

	No. of Patients
January	68
February	69
March	80
April	88
May	80
June	86
July	86
August	118
September	72
October	95
November	80
December	71

There appears to be a fairly even distribution of patients as far as birth month is concerned. The higher number born in August is of doubtful significance. It would be interesting to know the month of conception for all of these children but this information is very difficult to obtain.

TABLE III

RANK OF BIRTH

	No. of Patients
First Child	262
Second Child	199
Third Child	139
Fourth Child	109
Fifth Child	66
Sixth Child	46
Seventh Child	35
Eighth Child	17
Over Eight	36

Information was available for 909 patients and suggests that the first born child is at greater risk than subsequent children. A similar observation has been made by Perlstein,[3] but Roboz did not find this to be true in a smaller study involving 198 patients.[4]

TABLE IV

	No. of Mothers	Fathers
Below 15 yrs.	2	0
15 - 19	124	32
20 - 24	246	172
25 - 29	160	183
30 - 34	120	142
35 - 39	90	110
40 and over	34	118

The ages of 776 mothers and 757 fathers, at the time of the birth of the child with cerebral palsy, were recorded. Only 34 mothers were 40 years or older, but 126 were teenagers! It is of interest to note that 118 fathers had reached their fortieth birthday and 370 were 30 or older. The effect of the father's age on the offspring has received little attention in the past and is an area that needs further investigation.

TABLE V

FACTORS DURING PREGNANCY

	No. of Mothers
Normal	300
Prematurity	315
Twin	61
Toxemia	60
Bleeding	48
Systemic Infections	36
Other Problems	85

Information regarding the mother's pregnancy was recorded for 772 patients. Only 300 mothers reported that their pregnancy had been normal. The most common abnormality was a shortened gestational period with premature birth of the child reported by 315 mothers. There were 61 instances of twin pregnancy which is much higher than the national average of approximately one in 86 pregnancies.[5] No significant history of drug ingestion was noted although this type of information, notoriously difficult to obtain and evaluate, was not sought for as diligently in the past as it is at present.

TABLE VI

LABOR

	No. of Patients
Normal	293
Prolonged	49
Precipitate	22
No Labor	14
Other Problems	47

Reliable information concerning the mother's labor was present in only 425 of the 993 patients. The 14 instances where there was no labor represent those cases where a Caesarean section was done prior to onset of labor.

TABLE VII

DELIVERY

Place	No. of Patients
Hospital	616
Home	129
Other	14

ATTENDANT

	No. of Patients
M.D.	687
Midwife	15
Nurse	1
Unattended	37

PRESENTATION

	No. of Patients
Cephalic	557
Breech	83
Section	39

The majority of these children with cerebral palsy were delivered by a physician (91.5% of 740 patients) and in a hospital

(81.2% of 759 patients). The type of presentation was recorded in 679 cases. There were 83 instances of breech delivery and 39 sections were performed. Information regarding type of anesthesia and use of forceps was so scanty that it has not been included in the table. As new patients are admitted to the cerebral palsy clinics now, a history of the child's perinatal period is requested from the hospital of birth in order that reliable and complete information of this period will be available to the physician in charge of the child's care.

TABLE VIII

BIRTH WEIGHT

	No. of Patients
1 - 2 pounds	9
2 - 3 pounds	72
3 - 4 pounds	121
4 - 5 pounds	73
5 - 6 pounds	90
6 - 7 pounds	148
7 - 8 pounds	170
8 - 9 pounds	100
9 and over	40

Of 823 patients where the birth weight was known, 332 were found to be five and one-half pounds (2500 grams) or below. These patients are therefore regarded as having had a premature birth, although the fact that birth weight is not an entirely satisfactory gauge of maturity is acknowledged. It is seen that a large portion (40.3%) of the patients were premature. This does not mean, of course, that this was the cause of the child's cerebral palsy in every case. It is significant, however, that according to Illingworth "approximately a third of all children with cerebral palsy have been of low birth weight."[6] Very large babies are also often said to be prone to cerebral palsy. In this study 140 babies had a birth weight of eight pounds or above.

TABLE IX

NEONATAL STATUS

	No. of Patients
"Normal"	282
Delayed Respiration	81
Respiratory Distress	29
Oxygen Used	188
Cyanosis	75
Convulsions	63
Infections	13
Jaundice	45
Other Problems	123

In 724 cases where information was available, only 282 babies were said to have had no difficulty in the newborn period and some of these were premature babies. The cause of the difficulties experienced by the other babies was often not apparent. In many cases there were abnormalities of the pregnancy, congenital defects, or problems during delivery which may have adversely influenced the newborn, but often there was no such factor demonstrable. Nonetheless, it is obvious that the neonatal period is a significant time in the life of the child with cerebral palsy.

TABLE X

AGE AT DIAGNOSIS

	No. of Patients
0 - 6 mos.	323
7 - 12 mos.	185
1 - 2 yrs.	158
2 - 3 yrs.	21
Over 3 yrs.	18

TABLE XI

FIRST SIGNS OF CEREBRAL PALSY

	No. of Patients
Delay in Standing - Walking	149
Abnormality of Extremity	116
Delay in Sitting	109
"Slow" Baby	93
Perinatal Distress	54
Convulsions	30
Delay in Head Control	29
Other Signs	136

Tables X and XI show that the diagnosis of cerebral palsy was made relatively early in life and that delayed development was the chief sign leading to a suspicion of some abnormality by the parents. These data support the statement of McGreal[7] that an appreciable number of patients with cerebral palsy can be diagnosed during the first year of life, and the observation of Paine[8] that delayed developmental milestones are the usual reason the parents of an afflicted infant first seek medical help. These data also tend to accentuate the importance of regular, periodic medical examinations of all infants.

TABLE XII

TYPE OF CEREBRAL PALSY

	No. of Patients
Spastic	726
Monoplegia	14
Hemiplegia	252
Right	149
Left	103
Paraplegia	247
Triplegia	9
Quadriplegia	202
Uncertain	2
Athetosis	124
Generalized	105
Hemiplegia	4
"Tension"	12
Other	3
Ataxia	31
Rigidity	16
Mixed	34
Uncertain	62

An attempt had been made to classify all 993 patients, although in 62 cases the exact type remained uncertain. Of these patients, 73.1% were classified as spastic and 12.5% as athetoids. (No consistent effort has yet been made to evaluate the sensory deficits which may be present.) When the 332 patients with a history of prematurity were classified separately it was found that 283 (85.2%) of this group were spastics and that 139 of these were typed as spastic paraplegia. This is in accord with the prevalent opinion that spastic paraplegia is unusually common among prematures.

TABLE XIII

ASSOCIATED HANDICAPS

	No. of Patients
Mental Retardation	453
Convulsions	306
Speech Defect	260
Strabismus	209
Hearing Defect	27
Dislocated Hip	24
Hydrocephalus	24
Microcephaly	21
Other Defect	78
No Other Handicap	217

This table clearly demonstrates the fact that children with cerebral palsy frequently have multiple handicaps. Out of the group of 993 patients, only 217 were reported to have no handicap other than the motor dysfunction of spasticity, athetosis, etc. Although only 260 children were stated to have speech defects, it is likely that many others have such defects but perhaps of lesser degree. The high incidence of mental retardation is discussed after Table XIV. More difficult to measure but commonly present are emotional problems which can also be very real handicaps. A psychiatrist attends the cerebral palsy clinic in Louisville but the bulk of the task of providing emotional support to the children and their families is assumed by the nurses and social workers who are an indispensible part of the medical team. Also, the physical therapists and speech therapists who see many of these children more frequently than the other professional personnel are alert for evidences of emotional problems which may be hindering the child's progress.

The results of psychological testing were available in 726 patients. In another 150 patients a clinical evaluation of mental retardation (MR) or "normal" intelligence was indicated on the record. Three hundred twenty-

TABLE XIV

IQ RANGE

	No. of Patients
0 - 20	11
21 - 50	127
51 - 74	189
75 - 80	92
81 - 90	161
91 - 110	136
111 - 120	9
121 - 140	1
"MR"	126
"Normal"	24

seven patients were found to have IQ's below 75. These along with 126 other patients clinically assessed as retarded make up 51.7% of the 876 patients for whom information concerning their intellectual status was available. It is important to observe that another 253 patients were in the dull normal or borderline range with IQ's of 75 — 90 and therefore a total of 80.6% of the group were below the range of average intelligence. Only 10 patients were found by testing to be above average. Many of these children come from homes which are very deprived socio-economically and this in itself has probably had a depressing effect on their intellectual development. Obviously the intellectual capabilities of the child with cerebral palsy must be carefully considered in long range planning for his over-all care.

Treatment had consisted of bracing, various supportive devices including special shoes, drugs for associated seizures and for relaxation, some surgical procedures, speech, occupational therapy and physical therapy.

Summary

A survey has been made of the medical records of 993 children with cerebral palsy. The information obtained, which concerns such matters as etiology, diagnosis, classification and associated handicaps, has been presented and discussed briefly in this report. The Commission for Handicapped Children seeks to provide care for the multiple needs of these patients in order that each child may have maximum opportunity to reach his highest potential. It is believed that the results of this study will lead to even better care for these children in the future. It is hoped that this report will be of value to other physicians as they seek to understand and provide for the long term needs of their patients with cerebral palsy.

(*Continued on Page 493*)

The Management of Sinus and Ear Disease†

Robert C. Kratz, M.D.*

Newport, Kentucky

An optimistic practical approach to the problems of sinus and ear disease which can be used in the everyday practice of medicine is presented.

DEAFNESS can be divided into two types: neurosensory and conductive. Most of the common otologic problems seen can result in varying degrees of deafness.

Neurosensory deafness is often associated with tinnitus and dizziness. The common causes are:

1. The extension of middle ear infection into the inner ear. The treatment and prevention consists of adequate management of middle ear infection.
2. Acoustic trauma. The treatment and prevention consists of control of noise in the environment.
3. Drugtoxicity. The treatment and prevention consists of avoidance of ototoxic drugs where possible and a constant awareness that drugs can cause bizarre reactions in the auditory mechanism.
4. Heredity.
5. Tumors involving the acoustic centers and pathways.
6. Viral infections.
7. Miscellaneous conditions such as hypothyroidism, nephritis, lymphoma, vascular disease, syphilis, meningitis, encephalitis, measles, mumps and others.
8. Endolymphatic hydrops. Treatment for endolymphatic hydrops is based on the belief that it is a disease of capillary dysfunction, a localized expression of the hypometabolic state due to lowered adrenal cortical function and always accompanied by some other endocrinologic involvement. Patients are advised to avoid stress; they are put on a low carbohydrate diet and given Lipoflavonoid, Bellergal and hormones as indicated. Cortisone is avoided, but whole adrenal cortical extract is sometimes used. Goldberg[1] and Atkinson[2] have described successful methods to medically manage the condition. Lermoyez's syndrome, the predominating feature of which is tinnitus, is treated the same as endolymphatic hydrops; I believe it is one and the same disease.

Conductive deafness may be due to obstructions in the external canal which may be congenital or acquired deformities, foreign bodies or infection. External canal deformities can be surgically corrected. Foreign bodies and ear wax are best removed by irrigation. Avoid irrigation if the foreign body has the capacity for swelling. Occasionally ear wax should be softened with five drops of Johnson's baby oil used three times a day for a week preceding irrigation. The operating microscope has made foreign body removal less painful and less dangerous than in the old curet and otoscope days. External otitis, acute and chronic, is best managed with 1/20 Burrows Solution soaks applied continuously to a very small cotton wick placed in the external canal all the way to the drum. The appropriate antibiotic is given, as well as medication for sleep and pain. Although common ear drops may be cautiously used, beware of sensitization. Keeping the external canal clean without trauma is the key to the successful treatment of the condition. In chronic cases the skin of the canal is replaced with a skin graft. Tumors and cancers of the external canal are removed surgically.

Middle ear disease causing deafness may be

1. acute otitis media,
2. chronic otitis media,
3. cholesteatoma,
4. drum perforation,
5. otosclerosis,
6. tympanosclerosis,
7. ossicular chain derangement (acquired or hereditary),
8. serous otitis media, or
9. mastoiditis.

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†*Presented at the KAGP Session of the Annual Meeting of the Kentucky Medical Association, September 28, 1967*

**Otolaryngologist and plastic surgeon, practicing in Newport*

The treatment of acute otitis media in most cases is still Penicillin used in adequate dosage and myringotomy when indicated. In chronic otitis media the ear is kept clean by gentle suction. The correct antibiotic is determined by culture and sensitivity tests. The indicated antibiotic drop or powder is also helpful. Attention is given to disease of the nasopharyngeal, nasal, and paranasal structures and areas.

Chronic otitis media with cholesteatoma is a condition which deserves a great deal of respect because of its capacity to destroy the ear structures. If the patient lives long enough, it is likely to cause deafness and central nervous system complications. The cholesteatoma must be completely removed. Then the ear can be rebuilt. If the cholesteatoma cannot be completely removed, then it must be exteriorized as completely as possible, and efforts to reconstruct the ossicular chain and drum are abandoned. Dizziness in a patient with chronic ear disease may mean the beginning of involvement of the labyrinth or central nervous system. Mastoiditis still occasionally requires surgery when antibiotics fail to eradicate infection in the area. Dizziness, facial paralysis, and central nervous system complications might lead us to suspect a masked mastoiditis.

The simple repair of an eardrum when there is no other disease present is almost always successful. I have found vein and skin to give the best results. Stapedectomy and the use of a Schucknecht wire gelfoam prosthesis or a Guilford wire teflon piston will give better than 90 percent good results in the treatment of the conductive deafness due to otosclerosis. Tympanosclerosis can be corrected by dissection of the fibrous cartilaginous material from the middle ear. Sometimes it is necessary to reposition the ear bones or introduce new ossicles made from adjacent bone. Ossicular problems can also be corrected by repositioning and substitution of new ossicles constructed from adjacent bone or supplied from cadaver material.

The subject of serous otitis needs special attention because adequate management of this condition can conserve hearing in a large proportion of our population. There are two distinct types. In the first type the middle ear cavity is filled with fluid which may be thick or very thin. In the second type, the drum is sucked against the promentory of the middle ear and there is loss of the middle ear cavity. In the second type the ossicles may be prominent since the drum is plastered to them. The only cavity which remains is close to the eustachian tube opening and around the periphery of the drum. This may be a later stage of the first type of serous otitis. The treatment is management of nasal and nasopharyngeal disease. Allergies must be controlled. A teflon tube is placed through the drum to allow aeration of the ear and the fluid is removed by suction. Good results are obtained in the first type immediately. The adhesive type requires a longer time, but the drum will often elevate itself from the promentory if the disease has not progressed too far.

Sinusitis

There were no papers in the Archives of Otolaryngology for the preceding 12 months on the subject of sinusitis. At the meeting of the American Academy of Ophthalmology and Otolaryngology last year there was little mention of sinusitis and nothing new was offered in the way of therapy. Despite this lack of interest, the disease is still common and very important.

Etiology of Sinusitis:

1. Bacterial infection extending from the nose
2. Mechanical obstruction
3. Mechanical irritation
4. Carious teeth
5. Trauma
6. General debility
7. Allergy

Symptons of Sinusitis:

Pain, fever, chills, malaise and discharge are symptoms of sinusitis. The degree and location of these symptoms will depend upon the sinuses involved and the nature of the infection.

Diagnosis of sinusitis depends upon the presence of nasal discharge and the above symptoms. Transillumination is often helpful, sinus x-rays are useful but perhaps the most important single item is the irrigation of pus from the suspected sinus. The management of sinusitis carried out in my office is placing the patient on antibiotics and antihistamines. Allergy titrations are done where indicated. On the second visit, if the patient is not greatly improved, Lipiodal is placed in each antrum

(*Continued on Page 496*)

Paroxysmal Nocturnal Hemoglobinuria

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This article presents a patient with typical P.N.H. The pathophysiology, differential diagnosis, and therapy are discussed. This rare hemolytic anemia frequently may masquerade as other disorders unless severe enough to produce gross hemoglobinuria.

PAROXYSMAL nocturnal hemoglobinuria is a rare hemolytic anemia first described in 1882. However, there was very little recognition of this disease until the classic descriptions by Marchiafava in 1928 and Micheli in 1931.[1] More reports followed, but totalled only 183 patients in the last survey in 1957.[2] The present patient is being reported to focus further attention on this poorly understood disease.

Case Report

A 68-year-old woman was admitted to Our Lady of Bellefonte Hospital, Ashland, Ky., on Nov. 27, 1961 for evaluation of severe anemia. Except for a kidney stone in 1937 she had been in good health until 1959 when moderate anemia was found on routine examination. This was not symptomatic until early 1961 when she developed progressive weakness and first noted occasional dark coca-cola colored urine. In September, 1961 she was hospitalized in a nearby city with hemoglobin of 6.0 gm/100 ml and a reticulocytosis of 25%. She received prednisone 40-60 mg daily for the next two months without benefit, and splenectomy was advised, but refused by the patient. She developed increasing weakness, easy bruising, intermittent epigastric pain, persistently dark urine, urinary frequency and dysuria.

Examination revealed moderate signs of hyperadrenocorticism from steroid therapy. The skin and mucous membranes were pale, there were scattered ecchymoses over the limbs, and the sclerae were mildly icteric. The liver edge was palpable 3 cm below the right costal margin, the spleen tip could be felt on deep inspiration, but there was no lymphadenopathy. There was an apical systolic heart murmur but no other cardiovascular abnormalities, and the remainder of the examination was normal.

The hemoglobin was 5.3 gm/100 ml, hematocrit 19%, and the total white blood count was 9,600/cu mm with a normal differential count. There was a reticulocytosis of 25% with many nucleated red blood cells in the peripheral blood smear, the platelet count was 12,000/cu mm. Total serum bilirubin was 3.1 mg/100 ml of which 0.15 mg was direct reacting. Sternal bone marrow was normoblastic with a marked erythroid hyperplasia. Direct and indirect anti-globulin tests were negative, osmotic fragility of the red blood cells was normal, and no serum hemolysin or agglutinins could be demonstrated. The Kahn, V.D.R.L., and Donath-Landsteiner tests were negative. Blood urea nitrogen, thymol turbidity, cephalin flocculation, serum albumin and globulin were normal. X-rays of the chest, upper gastrointestinal tract, and intravenous pyelograms were normal.

The urine was a dark reddish-brown color with 4-plus proteinuria, there was microscopic pyuria with many granular casts, and urine culture revealed Escherichia coli. The urine gave a strongly positive reaction with benzidine reagent. The centrifuged urine sediment was dark brown, and microscopically there were numerous fine dark granules which stained blue with potassium ferrocyanide solution. Hemoglobinuria and hemosiderinuria suggested paroxysmal nocturnal hemoglobinuria, the acid-hemolysis test of Ham and the Crosby thrombin tests were both positive and confirmed this diagnosis.

The urinary tract infection responded to tetracycline, the epigastric symptoms were relieved by aluminum hydroxide gel, and prednisone was gradually withdrawn. She was given two units of washed red blood cells with marked improvement, disappearance of gross hemoglobinuria, and diminution of jaundice. She did quite well for several months, the

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hemoglobin varied from 8.0 to 9.0 gm/100 ml, and the urine gave only faintly positive tests for hemoglobin.

In April, 1962 she developed cellulitis of the left foot and thrombophlebitis of the left calf, associated with marked hemoglobinuria and weakness. The hemoglobin was 4.3 gm/100 ml, total white blood count 15,000/cu mm, platelets were 77,000/cu mm, and total serum bilirubin 3.5 mg/100 ml. The urine was reddish-black with 4-plus proteinuria, microscopic pyuria and casts, a strongly positive test for hemoglobin, and culture again revealed E. coli. She was treated with 4-hydroxyocumarin (Dicumarol) and antibiotics with marked improvement of the thrombophlebitis, cellulitis, and urinary infection. There was no improvement of the hemolytic process until she was given four units of washed red blood cells, following which the total serum bilirubin decreased to 1.5 mg/100 ml, gross hemoglobinuria disappeared, and the urine test for hemoglobin was negative.

During the next 10 months she had exacerbations of acute hemolysis at one to three month intervals, usually being precipitated by recurrent urinary or acute respiratory infections. Transfusion with two to four units of washed red blood cells promptly relieved each hemolytic episode, with disappearance of gross hemoglobinuria and a rapid decrease of serum bilirubin. During the intervening periods her hemoglobin varied between 8.0 and 9.0 gm/100 ml, urine tests for hemoglobin were weakly positive or occasionally negative, thrombocytopenia persisted with platelet counts from 10,000 to 150,000/cu mm, and reticulocytosis ranged between 4 and 26%. In February, 1963 she developed a respiratory infection followed shortly by marked hemoglobinuria, profound weakness, abdominal and chest pain, mental confusion, and acute pulmonary edema. Her hemoglobin as 3.4gm/100 ml and she died shortly after admission to the hospital.

Autopsy revealed mitral valvular insufficiency, cardiac enlargement, acute passive congestion of the lungs, and acute interstitial pneumonitis. The kidneys were moderately enlarged and a dense bronze color. There was a marked decrease in the number of glomeruli, and a diffuse increase in interstitial fibrous connective tissue associated with a dense mononuclear cell infiltration. The tubules were dilated with widespread deposition of hemosiderin in the tubular epithelium, and hemosiderin casts within many of the tubules. There was very little hemosiderosis in other organs.

Discussion

Paroxysmal nocturnal hemoglobinuria (P.N.H.) is a rare chronic hemolytic anemia, with an estimated incidence of two cases per million persons.[3] It is characterized by continuous intravascular hemolysis, punctuated by episodes of increased nocturnal hemolysis and hemoglobinuria. The clinical features of P.N.H. are often bizarre and misleading, particularly if the hemolytic process is not severe enough to produce gross hemoglobinuria. Leukopenia and thrombocytopenia are usually present at some time in the course of the disease, but hemorrhagic manifestations are rare. The bone marrow is usually normal except for erythroid hyperplasia, however hypoplastic marrow has been noted during aregenerative crises.[3,4] Infections are a frequent grave threat to patients with P.N.H., and are almost invariably followed by hemolytic crises. Venous thrombosis occurs frequently and is the most feared complication. This usually occurs in the extremities, portal or cerebral circulation, and abdominal pain due to splanchnic thrombosis is a common complaint. In one series of 53 patients 45% died as the result of venous thromboses, 20% died from infection, and 20% of the deaths were due to anemia.[3]

Red Blood Cell Abnormality

Dacie demonstrated that the primary abnormality in P.N.H. is in the erythrocyte, and that these defective red cells are uniquely susceptible to hemolysis by their own or homologous normal serum.[5] The hemoglobin is normal and the exact nature of the red cell defect is not known. The red blood cell alkaline phosphatase is reduced, there is decreased stability and increased turnover of adenosine triphosphate, decreased organic phosphate penetration of the cell, decreased red cell acetyl-cholinesterase, and a cellular lipid abnormality has been described. However the significance of these findings is not known.[4]

Plasma Factors

Ham has shown that these defective red cells are abnormally susceptible to a decrease in pH, and it has been postulated that the nocturnal

accentuation of hemolysis may be due to CO_2 retention which occurs during sleep. The clinical significance of this acid-susceptibility is not known but is the basis of a diagnostic test for P.N.H., the Ham acid-hemolysis test.[6] This test is not absolutely specific as positive tests may occur in the presence of marked spherocytosis, or with red cells which have adsorbed certain warm or cold agglutinins.[5] Crosby demonstrated that the addition of thrombin or thromboplastin to normal serum increases the hemolysis of P.N.H. erythrocytes, this being the basis for the Crosby thrombin test.[7] Several normal plasma factors must be present for hemolysis to occur, but the role they play is unknown: normal serum complement; traces of calcium and magnesium; thrombin or thromboplastin; properdin; and Crosby has described four additional normal plasma factors, two which are hemolytic and two inhibitory.[8] No serum hemolysins or agglutinins have ever been demonstrated in P.N.H.

Hemoglobinemia and Hemoglobinuria

In most types of hemolytic anemia red blood cell destruction is extravascular, taking place in the spleen and reticuloendothelial system where heme is converted to bilirubin and iron is conserved for re-use. In P.N.H. red cell hemolysis is intravascular with free hemoglobin being released into the circulating plasma. This plasma hemoglobin cannot be disposed of in the usual manner. The renal epithelium acts in this instance as a reticuloendothelial organ, degrading free plasma hemoglobin to bilirubin. Unlike the spleen the kidney is unable to restore to the circulation the iron derived from hemoglobin. This iron is deposited in the kidney and excreted into the urine as hemosiderin. Destruction of pigment by the kidney is not the only channel by which blood may rid itself of extracorpuscular hemoglobin. Free plasma hemoglobin also combines with a plasma protein, haptoglobin, up to maximum plasma binding capacity of 90-100 mg hemoglobin/100 ml. This hemoglobin-haptoglobin complex is too large to pass into the glomerular filtrate, so that free hemoglobin will not appear in the urine until its concentration in plasma has exceeded the haptoglobin binding capacity. A third method by which plasma is cleared of free hemoglobin is by the formation of methemalbumin, derived from the combination of plasma albumin with heme groups. Methemalbumin is then slowly excreted in the urine as urobilinogen.[9]

Kidneys

The kidneys in P.N.H. are conspicious by the intense hemosiderosis in the renal epithelium, with little or no hemosiderin deposits in the other organs. This is the most characteristic finding at autopsy, although not in itself diagnostic. These kidneys are larger than normal, suggesting that some impairment of function has prompted compensatory hypertrophy. Patients with P.N.H. may also appear to have chronic renal diesase as hemoglobinuria produces a positive test for protein in the urine, the formation of tubular casts, and varying numbers of white and red cells in the sediment. One would suspect that the intense chronic renal hemosiderosis would lead to destruction of kidney tissue. However this does not occur since this siderosis involves primarily the tubular epithelial cells which are continually being desquamated into the urine. In this way large amounts of hemosiderin are eliminated from the body, other organs being spared large hemosiderin deposits. In P.N.H. there is no scarring of the kidneys or destruction of nephrons unless infection supervenes. When renal failure occurs in P.N.H., it is not because of siderosis but is usually a consequence of repeated bouts of pyelonephritis.[10]

Differential Diagnosis

Hemoglobinuria is very striking when it occurs, but is not limited to P.N.H. Severe hemoglobinemia from any cause may produce hemoglobinuria if plasma hemoglobin levels exceed the haptoglobin binding capacity of the plasma. The most common cause of intravascular hemolysis and hemoglobinuria is a hemolytic transfusion reaction. Hemoglobinuria may also occur with march hemoglobinuria, favism, and black-water fever, but the clinical features readily distinguish these disorders from P.N.H. Occasionally hemoglobinuria occurs in severe acquired hemolytic anemias, but agglutinins or hemolysins in the patient's serum can be demonstrated. Another rare hemoglobinuria is paroxysmal cold hemoglobinuria which is usually associated with syphilis, characterized by intravascular hemolysis on exposure to cold, and serum hemolysins can be demonstrated by the Donath-Landsteiner re-

action. Hemosiderinuria is invariably found with any degree of hemoglobinemia, and is absent from the urine of patients with other types of hemolytic anemia in which intravascular hemolysis has not occurred.[9] The only other causes of hemosiderinuria are myoglobinuria and hemosiderosis; however, hemoglobinemia is not present in these conditions.[11]

In the absence of frank hemoglobinuria, P.N.H. may be mistaken for other illnesses. Hypersplenism may be suggested by the clinical picture of hemolytic anemia, pancytopenia, a proliferative bone marrow, and splenomegaly. Aplastic anemia may be simulated, particularly during periods of aregenerative crises when the bone marrow becomes temporarily inactive. Hemolytic anemia, thrombocytopenia, thromboses and perhaps neurological symptoms may suggest thrombotic thrombocytopenic purpura. Several patients with P.N.H. have been reported in whom the hemoglobinemia was not severe enough to produce hemoglobinuria, and undoubtedly P.N.H. masquerades as other disorders in many of these patients.[12] In the absence of an obvious cause for hemolytic anemia, the urine should be checked for hemosiderinuria. If positive, the Ham acid-hemolysis and Crosby thrombin tests will confirm the diagnosis if it is P.N.H.

Therapy

This is a chronic disorder and, if such serious threats as thromboses can be avoided, patients may live for many years. Transfusions of whole blood frequently result in severe reactions. Dacie first stressed the use of washed red blood cells for replacement, proposing that leukoagglutinins were the cause of such transfusion reactions.[13] This has proved to be a safe method of transfusion and has been observed to produce temporary remissions. Ham attempted therapy based on the ph dependency of hemolysis, noting that the administration of acid salts increased and alkaline salts decreased hemolysis.[14] However, long term use of alkaline salts in patients apparently allows the abnormal P.N.H. red cells to accumulate and eventually severe hemolysis breaks through. Even the mild acidosis produced by acetazolamide (Diamox) produced a severe hemolytic crisis in one report.[2] For this reason extreme care must be used in prescribing drugs for these patients. Long term use of 4-hydroxycoumarin (Dicoumarol) has been suggested to decrease the hemolytic process through its inhibition of thrombin formation.[9] However some reports have indicated that 4-hydroxycoumarin was clinically disappointing,[8] while others have found it to be useful.[10, 15] Heparin is contraindicated as it accelerates hemolysis.[3] Splenectomy has produced no permanent benefits,[3] and has been followed by death in some instances.[16] Neither ACTH or the adrenal corticosteroids have been of any benefit.[15,17] Dextran infusions have been found to temporarily control hemolytic crises, presumably by binding properdin; however, long term administration is not advisable since hemorrhagic complications are likely to develop.[18] At present transfusions with washed red blood cells appear to be the safest form of therapy.

Bibliography

1. Crosby, W. H.; Paroxysmal Nocturnal Hemoglobinuria. Classic description by Paul Strubing in 1882, and bibliography of the disease. *Blood* 6:270, 1951.

2. Dameshek, W., & Fudenberg, H.; Paroxysmal Nocturnal Hemoglobinuria. Atypical manifestations suggesting an immunologic disease. *Arch. Int. Med.* 99:202, 1957.

3. Crosby, W. H.; Paroxysmal Nocturnal Hemoglobinuria. Relation of the clinical manifestations to the underlying pathogenic mechanisms. *Blood* 8:769, 1953.

4. Gaither, J. C.; Paroxysmal Nocturnal Hemoglobinuria. A successful imposter. *N. E. Jour. of Med.* 265:421, 1961.

5. Dacie, J. V.; Diagnosis and mechanism of hemolysis in chronic hemolytic anemia with nocturnal hemoglobinuria. *Blood* 4:1183, 1949.

6. Ham, T. H.; Chronic hemolytic anemia with paroxysmal nocturnal hemoglobinuria. A study of mechanisms of hemolysis in relation to acid-base equilibrium. *N. E. Jour. of Med.* 217: 915, 1937.

7. Crosby, W. H.; Paroxysmal Nocturnal Hemoglobinuria. A specific test for the disease based on the ability of thrombin to activate the hemolytic factor. *Blood* 5:843, 1950.

8. Crosby, W. H.; Paroxysmal Nocturnal Hemoglobinuria. Plasma factors of the hemolytic system. *Blood* 8:444, 1953.

9. Crosby, W. H., & Dameshek, W.; The significance of hemoglobinemia and associated hemosiderinuria, with particular reference to various types of hemolytic anemia. *J. Lab. & Clin. Med.* 38:829, 1951.

10. Hutt, M. P., Reger, J. F., & Neustein, H. B.; Renal pathology in paroxysmal nocturnal hemoglobinuria. *Am. J. of Med.* 31:736, 1961.

11. Perkins, H. A., Boulware, J. M., Feichtmeier, T. V., Thayer, W. M., & Spaet, T. H.; Paroxysmal Nocturnal Hemoglobinuria: Report of four cases with observation on treatment with 4-hydroxycoumarin. *Ann. Int. Med.* 43:1218, 1955.

12. Hinz, C. F. Jr., Weisman, R. Jr., & Hurley, T. H.; Paroxysmal Nocturnal Hemoglobinuria. Relationship of in vitro and in vivo hemolysis to clinical severity. *J. Lab. & Clin. Med.* 48:495, 1956.

13. Dacie, J. V.; Transfusions of saline — washed red cells in nocturnal hemoglobinuria. *Clin. Sc.* 7:65, 1948.

14. Ham, T. H.; Studies on destruction of red blood cells. I Chronic hemolytic anemia with paroxysmal nocturnal hemoglobinuria: Investigation of mechanism of hemolysis with observations on five cases. *Arch. Int. Med.* 64:1271, 1939.

15. Kalant, N. & Cyr, D. P.; Treatment of paroxysmal nocturnal hemoglobinuria with ACTH. *Blood* 7:607, 1952.

16. Scott, R. B., Robb-Smith. A. H. T., & Scowen, E. F.: The Marchiafava-Micheli syndrome of nocturnal hemoglobinuria with hemolytic anemia. *Quart. J. Med.* 7:95, 1938.

17. Hartman, R. G., & Auditore, J. V.; Paroxysmal Nocturnal Hemoglobinuria. I Clinical studies. *Am. J. of Med.* 27:389, 1959.

18. Gardner, F. H., & Laforet, M. T.; The use of clinical dextran in patients with paroxysmal nocturnal hemoglobinuria. *J. Lab. & Clin. Med.* 55:946, 1960.



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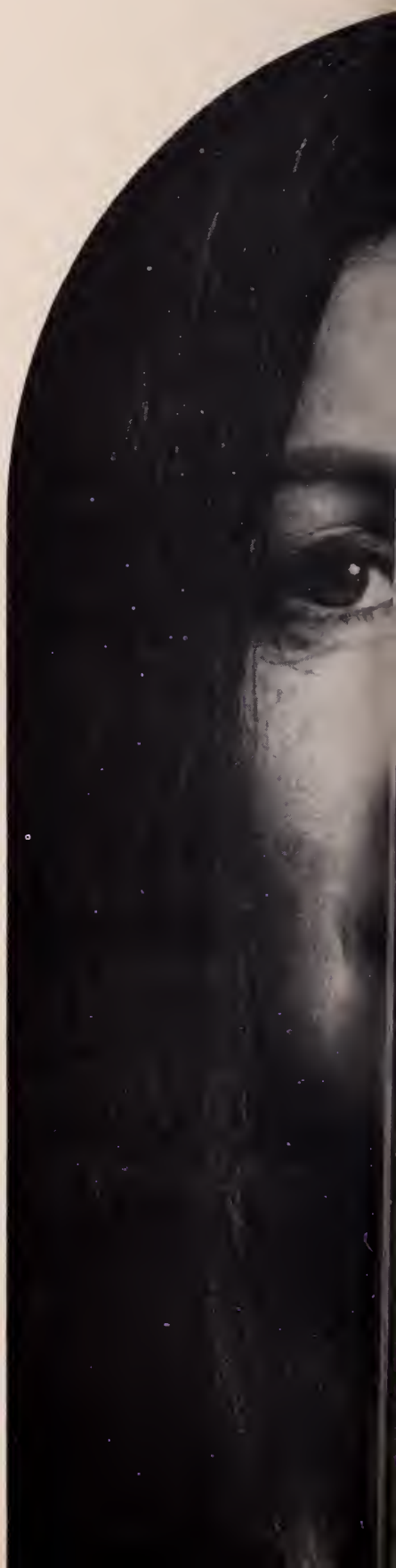
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Hydroxyzine, when administered to the pregnant mouse, rat, and rabbit induced fetal abnormalities in the rat at doses substantially above the human therapeutic range. Clinical data in human beings are inadequate. Until adequate data are available to establish safety in early pregnancy, hydroxyzine is contraindicated during this period.

Precautions: Hydroxyzine may potentiate the action of central nervous system depressants such as narcotics and barbiturates. In conjunctive use, dosage for these drugs should be decreased as much as 50%. Because drowsiness may occur, patients should be cautioned against driving a car or operating dangerous machinery. The usual precautions for intramuscular injection should be followed; soft-tissue reactions have rarely been reported when proper technique has been used. Hydroxyzine parenteral solution for intramuscular use should be injected well within the body of a relatively large muscle. In adults, the preferred sites are the upper outer quadrant of the buttock (i.e., gluteus maximus), or the mid-lateral thigh. In children, preferably the mid-lateral muscle of the thigh. In infants and small children the upper outer quadrant of the gluteal region should only be used when necessary, as in burn patients, in order to minimize the possibility of damage to the sciatic nerve. The deltoid area should be used only if well developed, such as in certain adults and older children, and only with caution to avoid radial nerve injury. Injections should not be made in the lower and middle thirds of the upper arm. Aspiration should be done to help avoid intravascular injection. On reported intravenous injection a few instances of digital gangrene have occurred distal to the injection site, considered to be due to inadvertent intra-arterial injection or possibly periarterial extravasation. Therefore, particular caution (aspiration and site injection) should be observed to insure injection only into intact veins; avoid either intra-arterial injection or extravasation. Intravenous administration should be accomplished slowly, no faster than 25 mg. per minute, and not to exceed 100 mg. in any single dose. In order to avoid possible adverse effects it is recommended that hydroxyzine parenteral solution be diluted to at least 50 cc. with sterile normal saline and administered over a period of four minutes or more, preferably into the tubing of a running intravenous infusion.

The intravenous administration of this drug is not recommended for children under 12 years of age.

Adverse Reactions: Drowsiness may occur; if so, it is usually transitory and may disappear in a few days of continued therapy or upon dosage reduction. Dryness of the mouth may occur with higher doses. Involuntary motor activity, including rare instances of tremor and convulsions, has been reported, usually with higher than recommended dosage.

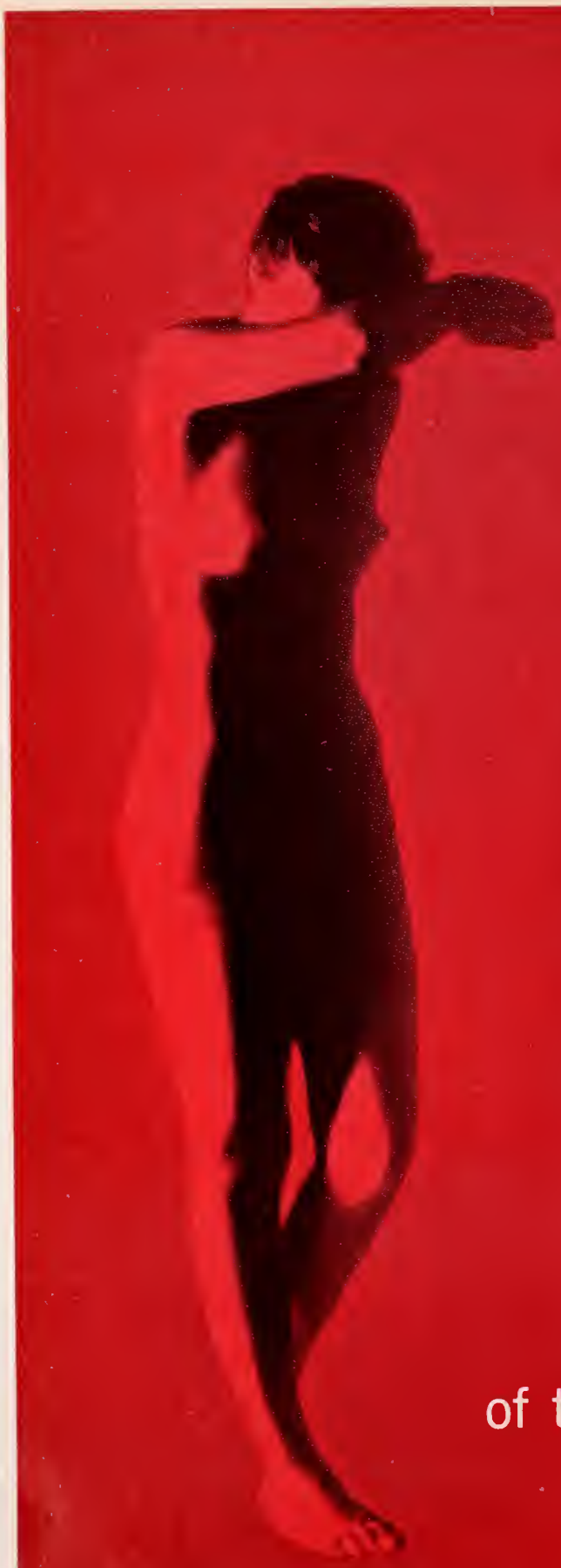
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More detailed professional information available on request.

References: 1. Greenhouse, H.R.: Medication and the Dependent Personality, Symposium of Non-Narcotic Drug Dependency and Addiction, The Amer. Psychiat. Assn., N.Y. County Dist. Branch, New York, N.Y., March 10, 1966.

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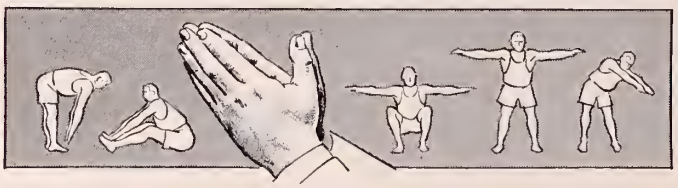
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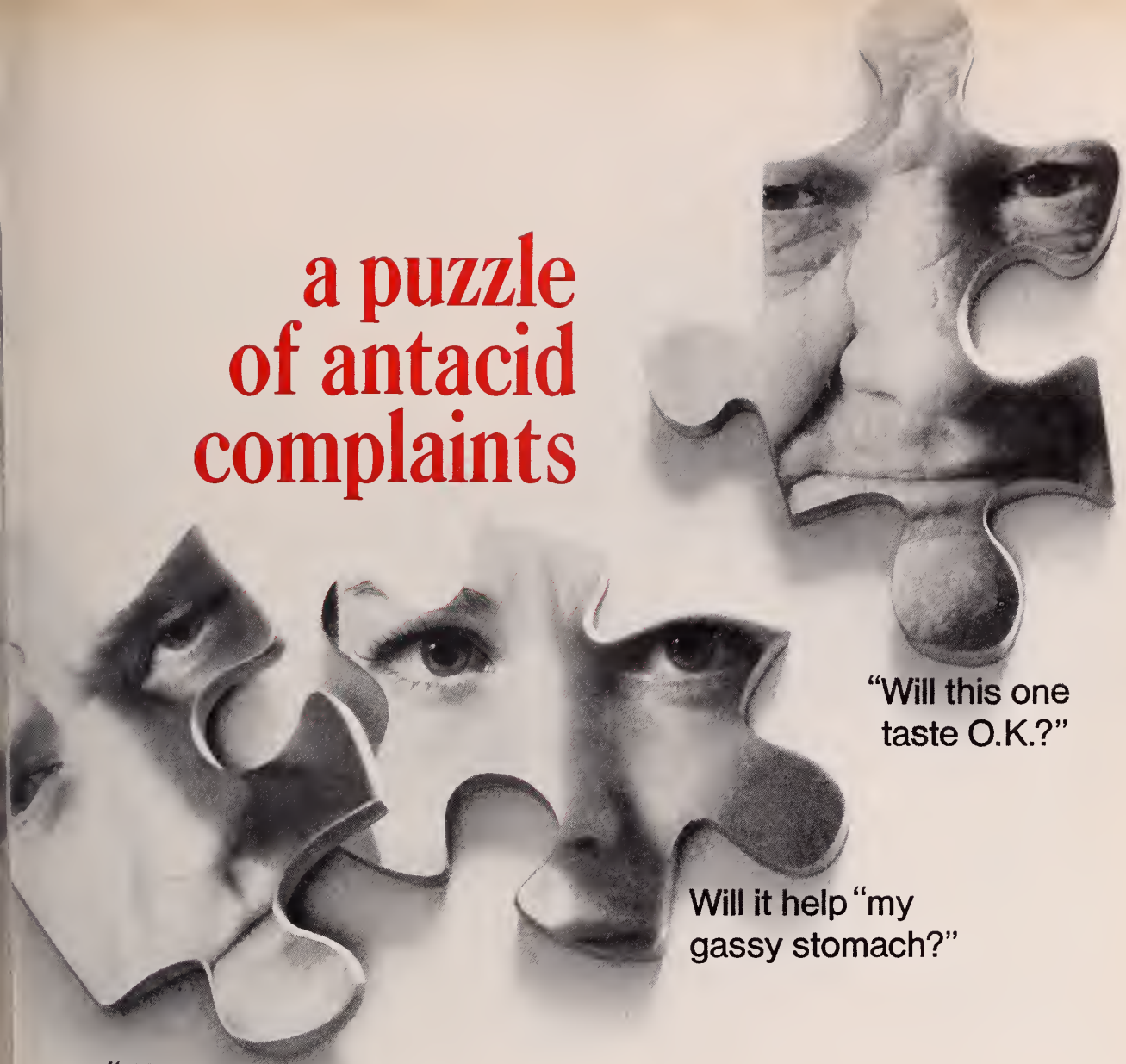
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References: 1. Hoon, J. R.: Arch. Surg. *93*:467 (Sept.) 1966.
2. Danhof, I. E., Personal communication.

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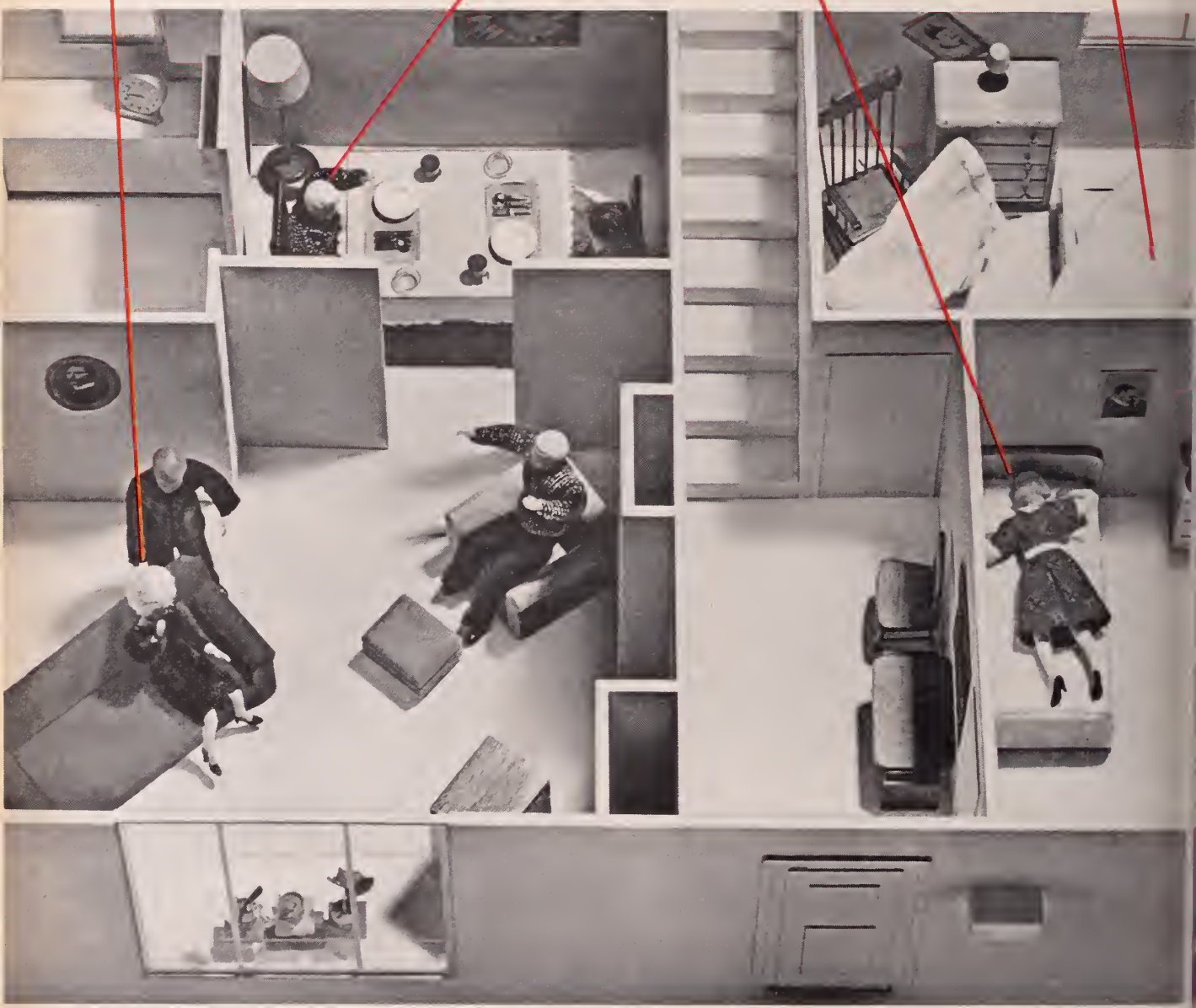
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Urinary Tract Injuries During Pelvic Surgery

Charles R. Oberst, M.D.* and
Douglas M. Haynes, M.D.**

Louisville, Kentucky

Careful dissection and adequate visualization will prevent most urinary tract injuries during pelvic surgery. Prompt recognition and treatment give best results.

URINARY tract injuries are an occasional unfortunate sequel of gynecologic surgery. The wide variations of the ureter's course and its anomalies increase the hazards of injury. The ureter's long retroperitoneal course and high degree of mobility render it easily displaceable by a variety of lesions. Careful handling of the ureter, avoidance of wide circular stripping, and protection during retraction will reduce the likelihood of injuries.[6]

During operation, the ureter may be injured by cutting, crushing, kinking or ligation. These injuries are usually manifested early but may be delayed, particularly if the damage is secondary to interference with the nervous or vascular supply. Partial ureteral obstruction by compression or amputation may produce silent progressive hydronephrosis with complete absence of signs and symptoms.[11] Complete obstruction of a ureter may be followed by silent atrophy of the kidney, while a severed ureter may produce a fistulous opening into the perineum or vagina.

The procedures most commonly responsible for urinary tract injuries are radical hysterectomy, abdominal hysterectomy, supracervical hysterectomy and vaginal hysterectomy, in that order.[1, 10]

It is extremely difficult to make an accurate estimation of the incidence of urinary tract damage during gynecologic surgery. The incidence ranges from 0.04 to 3 per cent in surgical operation for benign conditions. All gynecologic surgeons, no matter how skilled, will occasionally face a ureteral or bladder injury.

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Material

This paper records our experiences with injuries to the bladder and ureter during the years 1959-1964 at Louisville General Hospital.

There were 1870 pelvic operations performed on the gynecologic service. (Table I) Miscellaneous operations include Cesarean sections and adnexal surgery.

TABLE I

Pelvic Operations

Total Pelvic Operations	1870
Total Abdominal Hysterectomies	649
Vaginal Hysterectomies	516
Cesarean Hysterectomies	32
Radical Hysterectomies	19
Subtotal Hysterectomies	6
Miscellaneous Operations	648

There were six bladder lacerations, two transected ureters, two postoperative ureterovaginal fistulae and one vesicovaginal fistula. (Table II) The first case was a transected ureter which occurred at the level of the infundibulopelvic ligament on the left, and the second was a transected ureter which occurred at the level of the right uterine artery. Both patients had severe chronic pelvic inflammatory disease and fibroids. Cases three and four were postoperative ureterovaginal fistulae fol-

TABLE II

URETERAL INJURIES	INDICATIONS
1. TAH, Bilateral S. & O.	1. Chronic PID and Fibroids
2. TAH, Bilateral S. & O.	2. Chronic PID and Fibroids
3. Wertheim Hysterectomy and Radical Lymphnode Dissection	3. Stage I Ca. of Cervix
4. Wertheim Hysterectomy and Radical Lymphnode Dissection	4. Stage I Ca. of Cervix

lowing a Wertheim radical hysterectomy for Stage I carcinoma of the cervix. These developed six and 19 days postoperatively.

A. Repair of Ureteral Injuries: Repair of both transected ureters was the same. (Table III) The bladder was opened and a catheter

TABLE III

SITE OF INJURY OF THE URETER	TREATMENT
1. Left infundibulopelvic stump	1. Ureters reanastomosed over a ureteral catheter as a splint, constant bladder drainage, stab wounds for retroperitoneal drains at the injured site.
2. Distal one-third; near the uterine artery on the right	
3. Left ureterovaginal fistula	1. Ureteral catheters left in place 18-25 days with constant bladder drainage. Repeat IVP.
4. Right ureterovaginal fistula	

threaded through the cut ends which were approximated and then sutured with 4-0 plain gut. The ureteral catheter was then connected to a continuous draining urethral catheter. Stab wounds for drains were placed retroperitoneally at the injured site for the inevitable extravasation of urine. The repairs were accomplished retroperitoneally. The intravenous pyelograms in these two cases showed healing at one month and 10 months respectively. One patient was still taking sulfa drugs for a continuous kidney infection.

The two postoperative ureterovaginal fistulae followed Wertheim hysterectomies. No overt damage to the ureter was noted at the time of surgery. Foley catheters are routinely left in place for 10-14 days after radical hysterectomies at Louisville General Hospital. Treatment was ureteral catheterization with constant bladder drainage for 18-25 days. One healed without difficulty, the other still has minimal leakage 17 months postoperatively. All were treated with chemotherapy which ranged from sulfonamides (Gantrisin) to chloramphenicol (Chloromycetin). Urine cultures were done routinely.

B. Bladder Injuries: All six bladder injuries were recognized at the time of the operation. (Table IV) The seventh case is a postoperative Wertheim hysterectomy bladder fistula. All six surgical lacerations healed per primum. (Table V) They were routinely treated with 10 days of constant bladder drainage, catheter irrigations and sulfonamides. Case five had partial ureteral obstruction with hydronephrosis postoperatively. The blood urea

TABLE IV

OPERATION	INDICATION
1. Vaginal Hysterectomy & APC	Stress Incontinence
2. Subtotal Hysterectomy Bilateral S. & O.	Chronic PID
3. TAH, Marshall Marchetti	Large Dermoid Cyst and Stress Incontinence
4. TAH, Left S. & O.	Chronic PID
5. TAH, Right S. & O.	Fibroids, Cystorectocele
6. C-hysterectomy	Third Repeat C-section
7. Wertheim Hysterectomy Radical Node Dissection	Stage I Ca. of Cervix

nitrogen rose to 50 mgm. per cent at one time. The patient was treated with ureteral catheterization for only three days and discharged on sulfa drugs and followed as an out-patient. Five months later an intravenous pyelogram showed a normal kidney and ureter, and the patient has done well. In case seven, the patient began to leak urine spontaneously 12 days postoperatively. Urologic workup showed a previously unrecognized diverticulum with resultant vesicodiverticulovaginal fistula. Healing resulted after treatment with sulfa and constant bladder drainage for 27 days.

C. Signs and Symptoms: Ligation of one ureter may have only minimal symptoms. The discomfort may be attributed to the surgical procedure. Pain in the flank may be overshadowed by the pain from the abdomen. Usually the normal kidney maintains homeostasis, and renal function is not altered clinically. Postoperatively, the presence of pain, discomfort or tenderness in the flank, elevation of temperature, adynamic ileus and abdominal distention should suggest the possibility of a ureteral injury.

Bilateral ligation is obvious by the immediate postoperative anuria. If extravasation of urine occurs, there is usually a severe adynamic ileus, and the patient may become critically ill. Signs of bladder fistula may occur at any

TABLE V

SITE OF BLADDER INJURY	REPAIR
1. Dome of the bladder	1. Two rows of inverting stitches
2. Tear in the dome and base of bladder	2. Dome closed in two layers, cystostomy, then ureterostomy, then closure of bladder base and drainage
3. Puncture wounds with needle at U-V angle	3. Remove stitches purse string holes
4. Dome of bladder (freeing colon)	4. Two rows of sutures
5. Bladder base	5. Purse string closure
6. Dome of bladder	6. Two inverting layers
7. Postoperative vesicodiverticulovaginal fistula	7. Constant bladder drainage for 27 days

time,[1] while signs of a ureteral fistula usually appear 10 days or later postoperatively.

Prevention

Adequate evaluation of the urinary tract is essential prior to the operation in the presence of any obvious gross abnormality of the pelvis. The intravenous pyelogram demonstrates the presence of congenital absence of one kidney, the kidney function, and perhaps its anomalous location. It may also demonstrate the presence of an incomplete or complete reduplication of one or both ureters, which do occur in three to five per cent of people.[7] An already dilated ureter may be noted with or without hydronephrosis. The contour and possible displacement of the bladder can be noted.

Ureteral Catheters: In 1902, Sampson recommended that preoperative ureteral catheterization be done as a prophylaxis against ureteral injuries.[9] He stated that the prophylactically catheterized ureter could be palpated any time during the operation, and thus make unnecessary the dissection for exposure of the ureter. While the helpfulness of ureteral catheter is obvious in a complicated case, there are definite limitations associated with its use. The difficulty encountered in palpating a catheterized ureter is not generally recognized. Failure to palpate a catheter does not give one permission to cut with abandon. More than one ureter has been cut with the catheter in place. The chance of recognizing a cut ureter is increased considerably, so a catheter has some merit in that respect. For palpation, a #6 French catheter should be used. Passage of an indwelling ureteral catheter may be technically impossible when it is most needed.[12] The catheter is relied upon by the more inexperienced surgeon; as his experience grows, he tends to rely more on direct visualization.

The single most valuable measure for avoiding ureteral injury is adequate exposure and direct visualization of the structure early in the operative procedure. The ureter is usually easily identified as a narrow muscular white tube coming over the pelvic brim and crossing the bifurcation of the common iliac artery. It then courses along the pelvic wall and passes inferior to the round ligament and uterine artery. It transmits peristalsis if pinched. Dissecting out the ureter is not necessary if it is visible. If the ureter is not visible and dissection is hazardous, or if there is danger of compromising the ureter's blood supply, the bladder should be opened and a #6 French catheter threaded up the ureteral orifice.

Treatment

The gravity of a ureteral or bladder injury lies not in the injury itself, but in failure to recognize the injury at the time of the operation and to take steps to protect the patient from the dangers of extravasation of infected urine, possible irreparable loss of renal function or death. Occasionally, despite the greatest care, but more often because of poor exposure, unnecessary haste or poor control of bleeding, the ureter or bladder is clamped, cut, compressed or ligated. Treatment of these complications is governed by the patient's condition and the experience (or lack of experience) of the operator. The established principle is adequate drainage of the involved kidney and the operative site, and re-establishment of continuity of the ureter over a splinting tube.[6, 5]

A. Clamping and ligation of a ureter: Accidental ligation of a ureter is treated best by deligation. This procedure may not be simple because the inadvertent ligation is usually associated with mass ligation in an effort to control troublesome bleeding. Fear of recurrent hemorrhage may prevail and prevent recognition. Of course, if the ligature is found, it should be cut immediately; usually this is all that is necessary. If doubt remains about viability of tissue in an area adjacent to a clamped ureter, several things can be done. The ureter proximal to the injury can be gently pinched; if peristalsis continues through that area, the tissue is probably viable. Indigo carmine might be injected through a #26 needle proximal to the injury to see if the ureter leaks. If it does, or if there is still doubt, a #6 French catheter can be inserted through the injured site either from the bladder upward, or through the ureter proximal to the injury downward. A retroperitoneal drain is used at the injured site. The catheter is then left in place for 7-10 days. If the surgeon does not want to cut the ligature then, a ureterostomy is done high above the injury by inserting a large ureteral catheter or small nasogastric tube into the ureter up into the renal pelvis and leading the

distal end out through a stab wound in this side. A small Penrose drain is used. Both tube and drain are retroperitoneal.

B. The transected ureter: The transected ureter is usually recognized at the time of operation either by noting the cut ends or the presence of urine in the operating field. Its repair is based upon the location of the injury. If it occurs in the proximal two-thirds of the uterer, the latter is splinted on a large ureteral catheter and closed with four or more plain gut sutures placed primarily through the muscular and adventitial layers, rather than through the mucosa. The catheter may then be connected to the urethral catheter or brought out through the bladder and the inferior part of the incision. A retroperitoneal drain is always used for the extravasated urine. The severed edges of the ureter are sutured together by a "spatulation" technique which is a modified side to side type of anastomosis to prevent ureteral stricture. If the transection is noted at the beginning or during the operation, the cut ends are tagged, and the gynecological operation is completed before the repair of the injury.

If the transected ureter is in the distal one-third, it is anatomosed to the dome of the bladder. The ureterocystostomy can be done in several ways. The bladder is opened extraperitoneally, and the trigone identified. A stab wound is made above the ureteral orifice on that side and the end of the proximal segment drawn in. The end of the ureter is then cut vertically to make it fishmouthed, then the two lateral flaps are fixed to the inside wall of the bladder with through and through sutures. The adventitia of the ureter is then sutured to the fascia and muscular wall of the bladder for more support and to decrease the tension on the anastomotic site. A T-tube may be used for drainage through a stab wound, or a urethral catheter can be inserted into the bladder and the latter then drained via the urethra.

Should it become apparent that the tension is too great, a bladder flap must be developed to create a tunnel and add the necessary length. This method, while not particularly difficult, is time-consuming and should be attempted only if one is familiar with its details.

C. Bladder injuries: Two principles are usually emphasized in connection with the management of surgical injuries of the bladder. First, the site of repair must be drained retroperitoneally; secondly, the bladder must be drained so that urine cannot accumulate.[3] However, in our series no retroperitoneal drains were used, yet all the patients had good results.

The technique for closure of a fresh wound in the bladder is simple. Sufficient bladder wall is mobilized to allow closure without tension. The submucosa, preferably without mucosa, is closed with fine catgut suture. The muscularis and adventitia are closed in two layers with chronic catgut. The bladder is usually adequately drained by a urethral catheter. If the damage is extensive or breakdown possible, a cystostomy tube should be placed either vaginally or suprapubically.

Lacerations or incisions of the bladder, if properly repaired, heal without complications. This has been true in our series. The patients were all checked with Methylene blue instillations to insure their "water tightness" and to check for any other unrecognized bladder injuries.

Discussion

Our incidence of injury to the urinary tract is 0.9 per cent. (Table VI) Injuries to the ureter and bladder are more common than is generally believed. Solomons[11] in his series of 200 consecutive intravenous pyelograms before and after surgery, found a two and one-half per cent incidence of ureteral injuries. These would not have been recognized except for the pyelograms. Certainly, there is reason to do postoperative intravenous pyelograms on the difficult cases.

Injury to the ureter may occur at any point in its course. It is most likely to occur at the point where the ureter crosses under the uterine artery. Injury to a ureter is not nearly as great an error as the failure to recognize it. The best prophylaxis is adequate downward dissection of the vesicovaginal space. As the bladder is pushed inferior, the ureters are pulled laterally. If the operator develops the vesicovaginal space 1-2 cm. below the cervix, it is unlikely that any ureter will be clamped. One should not depart from the recognized procedure in an overzealous attempt to save

TABLE VI

Per Cent Of Urinary Tract Damage

AUTHOR	YEAR	TYPE OF OPERATION	NUMBER OF OPERATIONS	PER CENT OF URETERAL INJURIES
Turner[14]	1960	All types of hysterectomies	3898	0.17%
St. Martin[13]	1952	Major gynecologic surgery except Wertheims	332	2.42%
Beechman[2]	1954	All types of pelvic surgery	2290	0.56%
Falk[4]	1954	Major gynecologic surgery for benign conditions	6309	0.08%
LGH	1960-1964	All types of hysterectomies	1222	0.9%

the patient from cancer. For example, a tendency to extend the parametrial dissection because of a preoperative diagnosis of carcinoma in situ should be held in check. Another predisposing circumstance increasing the possibility of injury is a double ureter, present in one woman in 20. The surgeon may carefully preserve one ureter but unknowingly injure the other.[8] Palpation of the renal areas for tenderness postoperatively should be as routine as palpation for calf tenderness. Other important principles are the avoidance of needless dissection of the ureter and bladder base; the use of fine absorbable suture material near the urinary tract; and the application of pressure without mass ligature for hemorrhage.

Bladder injuries are most often associated with total abdominal hysterectomies. The usual cause is a tearing of the bladder during its dissection from the cervix and upper vagina. The dissection should be done sharply under careful inspection. The inexperienced surgeon may use gauze pads to push the bladder down blindly. The result is tearing of tissue; this leads to bleeding which in turn interferes with exposure and prevents recognition of a tear, which therefore is not promptly sutured.[8] Certainly, the anatomy may be distorted from many different pelvic diseases or previous operations. After any difficult pelvic operation, the bladder should be checked for injuries. It is a simple procedure to inject Methylene blue or boiled powdered milk into the bladder to look for leakage.

Vesicovaginal fistulae may form unexpectedly when a hematoma develops between the vagina and bladder wall. Infection follows, and the resulting abscess erodes into the bladder on one side and into the vagina on the other side. This may sometimes be prevented by leaving a small opening in the cuff.

To detect a fistula, a simple three swab test is sometimes helpful. A colored solution is injected into the bladder and three plugs of cotton are inserted into the vagina. The patient walks about for 10-15 minutes and then the plugs are removed. If the lowest swab is colored, any leakage is due to stress incontinence or leakage of urine from the urethra. If the middle or upper swab is colored, the problem is a vesicovaginal fistula. If the lower two are clear and the top one is wet with clear urine, the patient presumably has a ureterovaginal fistula.[8]

After the surgeon has repaired a bladder injury or fistula, he must always check the patient carefully for unrecognized second injury incurred at the time of the reparative operation.

Generally, the immediate results of bladder repairs are excellent. The immediate results of conservative surgery of ureteral injuries may be disheartening at first, but the late results are good in most cases. Early diagnosis with adherence to basic urologic principles of adequate splinting and drainage, control of infection and close followup are important in management.

Summary

1. In the past five years at Louisville General Hospital, 1,222 hysterectomies were performed. There were six bladder laceration, two transected ureters and one vesicovaginal fistula and two ureterovaginal fistulae.

2. Ureteral catheters have value in difficult cases, but their limits must be recognized.

3. Postoperative intravenous pyelograms

should be done routinely on all Wertheim hysterectomies, and any other difficult cases.

4. One woman in 20 has reduplication of the ureter.

5. Adequate exposure with direct visualization is the best prophylaxis against urinary tract injury.

6. All efforts should be made to recognize urinary tract injuries at the time of surgery and to repair them then.

7. The best prevention is an alert mind and an awareness of the type of case that can produce this kind of injury.

References

1. Aschner, P. W. Accidental injury to ureters and bladder in pelvic surgery. *J. Urol.*, 69:744, 1953.
2. Beechman, C. T., Conger, K., and Horrax, T. M. Ureteral injury in pelvic surgery., *Obstet. Gynec.*, 3:343; 1954.
3. Benson, R. C., and Hinman., F, Jr. Urinary tract injuries in obstetrics and gynecology. *Am. J. Obstet. Gynec.*, 70:467, 1955.
4. Falk, H.C., and Bunkin; I.A. Ureteral injuries; prevention and management during course of gynecologic surgery for benign disease. *Obstet. Gynec.*, 4:4, 1954.
5. Gerbie, A.B., and O'Connor; J.V.T. Gynecologic ureteral injury. *Postgrad. Med.*, 32:352, 1962.
6. Harvard, B.M. Ureteral injuries in routine pelvic surgery. *Med. Clin. N. Amer.*, 43:1713, 1959.
7. Higgen, C.C. Ureteral injuries. *JAMA*, 182:225; 1964.
8. Moir, J.C. Injuries of the bladder. *Am. J. Obstet. Gynec.*, 82:124, 1961.
9. Sampson, J. A. Ligation and clamping the uterer as comlications of surgical operations. *Am. Med. Assn. Tr.*, 4:693; 1902.
10. Schneider, J. P., Emmett J. L., and Ferris D. O. Injuries to the ureter and bladder occurring during pelvic and left colon surgery. *Gen. Pract. Clin.*, 17:87; 1958.
11. Solomons, E., Levin, E. J., Bauman, J., and Baron, J. A. pyelographic study of ureteric injuries sustained during hysterectomy for benign conditions. *Surg. Gynec. Obstet.*, 111:41; 1960.
12. Spence, H. M., and Boone, T. Surgical injuries to the uterer. *JAMA;* 176:13, 1961.
13. St. Martin, E. C., Trichel B. E., Campbell, J. H., and Lache, C.M. Ureteral injuries in gynecologic surgery. *J. Urol.*, 70:1; 1952.
14. Turner, H.B.. The recognition of ureteral damage following pelvic surgery. *J. Med. Assn. Alabama,* 30:1, 1960.

Manuscript Memos

Manuscripts should be submitted in duplicate to The Journal of KMA, an original copy and one carbon, and typed with double spacing. Maximum length of an article should not exceed 4500 words; the Board of Consultants on Scientific Articles prefers that they be briefer than this when possible.

In submitting a manuscript, the author is requested to include a concise summary, not to exceed 35 words, to be used as a sub-title when the article is published in The Journal. The purpose of the summary is to create additional interest and encourage greater leadership.

Footnotes and bibliographies should conform to the style of the Quarterly Cumulative Index Medicus published by the American Medical Association. This requires in the order given: name of author, title of article, name of periodical, with volume, page, month—day of month if weekly—and year. The Journal of the KMA does not assume responsibility for the accuracy of references used with scientific articles.

All scientific material appearing in The Journal is reviewed by the Board of Consultants on Scientific Articles. The editors may use up to six illustrations, with the essayist bearing the cost of all over three one-column halftones.

Arrangements for reprints of an article should be made directly with the publisher of The Journal, Gibbs-Inman Printing Company, 817 W. Market St., Louisville, Ky.

The bylaws of the Kentucky Medical Association provide that all scientific discussions and papers read before the KMA Annual Meeting shall be referred to the KMA Journal for consideration for publication. The bylaws further state that the editor or the associate editor may accept or reject these papers as it appears advisable and return them to the author if not considered suitable for publication.

Please mail your scientific articles to The Journal of the Kentucky Medical Association, 3532 Janet Ave., Louisville, Kentucky 40205.

Application

FOR SPACE IN THE SCIENTIFIC EXHIBIT SECTION

1968 Annual Meeting — Kentucky Medical Association

Convention Center — **Louisville, Kentucky** — **September 24, 25, 26**

Fill Out and Mail to:

T. R. MARSHALL, M.D., Chairman

Committee on Scientific Exhibits

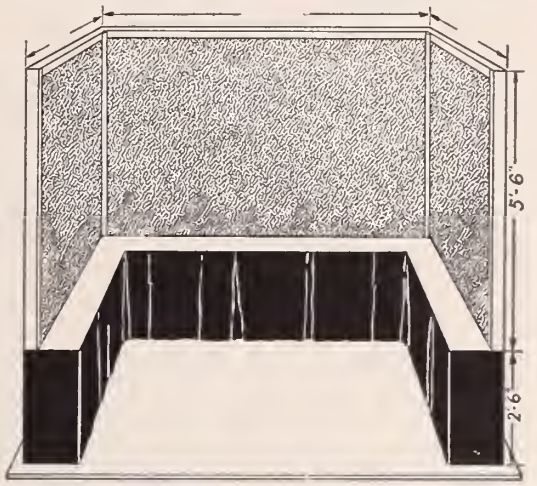
Kentucky Medical Association

3532 Janet Avenue

Louisville, Kentucky 40205

Applications for space should be received before July 1, 1968

Dimensions and structure of KMA Scientific booth are shown in accompanying illustration



1. Title of Exhibit: .....
2. Name (s) of Exhibitor (s): (AMA Member?) .....

   Institution (if desired): .....

   Mailing Address .....
3. Do you have a built-in exhibit? .....
4. Description of Exhibit: (Attach Brief Description Not To Exceed 50 Words to this blank)
5. Exhibit will consist of the following: (Check which)

   Charts and Posters.... Photographs.... Drawings.... X-rays....

   Specimens.... Moulages.... Other Material..... (Describe)
6. Booth Requirements:

   Amount of total wall space needed? .....

   Back wall ..... Side walls (All side walls are 4') .....

   Square feet needed? ..... Shelf desired? (yes or no) .....
7. Indicate sources of assistance provided in connection with the exhibit. .....
8. Has this exhibit been exhibited before? If so, when & where? .....

Date ....

Signature of Applicant

The Mead Johnson Aesculapius Award of $200. 00 and identifying plaque will be presented by the KMA for the best exhibit in 1968.

The Kentucky Medical Association will provide without cost to the exhibitor the following: Exhibit space, shelves, sign for booth, current, bracket lights, provided all items are approved in advance by the committee.

Cost of transporting exhibits to the meeting must be borne by the individual exhibitor as well as costs of cards, signs, etc., which are a part of the exhibit.

View boxes, furniture, decorations, etc., may be rented, if desired, by applying directly to Jos. T. Griffin Company, 704 West Main Street, Louisville 2, who supply equipment for the annual KMA meeting.

Due to the shortage of space, please have your exhibit as compact as possible.

SPECIAL ARTICLES

Medical Problems in Riot Situations

This article was prepared at the request of the Kentucky Medical Association's Disaster Medical Care Committee, William T. Rumage, Jr., M.D., chairman. Members of the committee are James C. Drye, M.D., George E. Estill, M.D., Richard D. Floyd, M.D., Don C. Haugh, M.D., Charles E. Hornaday, M.D., and Robert E. Reichert, M.D.

THE total patient load in the involved hospital does not ordinarily increase. Elective treatment is deferred and other urgent or emergency patients or ordinary illnesses are sent to other hospitals. Transportable patients should be removed from the hospital which is designated to take care of the rioting personnel. Plans should be made to send the patients home or to other hospitals.

Thus professional care of patients is no more demanding than under usual circumstances. However, the majority of the cases as a result of the riots arrive during the evening hours. Many of the injuries are minor although there are some serious gun shot wounds and other injuries. There are some injuries that have an unusual frequency during these situations. Cut heel tendons result from individuals kicking out store windows. There is a high frequency of burns caused by Molotov cocktails.

The main problem is security, internal and external. Most of this problem is a police responsibility. However, part of it must be solved by proper planning with community officials and the hospital professional and administrative staffs. Hospitals that handle such casualties are frequently a target of the rioters. Newark and Detroit found it necessary to set up three concentric defensive rings of police and soldiers around the hospital itself to protect it. The rioters shot at ambulances, ambulance drivers, nurses and through the hospital area itself. The police must be informed that hospitals may be targets. Windows should be darkened by shades so that people at a distance cannot see into the hospitals. Critical entrance ways should be protected by sandbags and by other means.

The patients who are administered to in these hospitals may be prisoners. They are generally very hostile. It must be decided in the hospital as to whether separate prisoner wards must be set up.

The hospital employees, both white and colored, remain loyal to the hospital. However, they may not show up for work, either to stay at home to protect their families and property or because they are afraid that they may be attacked while going in and out of the hospital area. Plans must be made to transport these employees safely or to house them in the hospital. Hospitals should issue identification cards to all personnel so that they may pass through an external security force to get into the hospital.

Civil disturbances have occurred in cities varying in size, from the very small to the largest in our nation. The medical problems caused by riots are another reason for taking immediate steps to develop your community disaster plan.

Community Medicine in Argentina
Experiences in a Cross-Cultural Clerkship†

Tim and Sally Fleming*

Introduction

SINCE the University of Kentucky Medical School was activated, the department of community medicine has offered a 12 week elective program during the senior year in international cross-cultural medicine. During the five years that we have had the senior students, 49 of them have worked in 25 foreign sites. Under overall direction by our faculty, but under the immediate supervision of a faculty member of a foreign medical school in an underdeveloped region, students have carried out a wide range of activities including clinical work, epidemiologic projects, and community health studies. They have been oriented to the site during a preliminary program in Kentucky and have had an introductory course in language before embarking.

Through participation in clinical, preventive and community medicine, the student learns to appreciate the countries' overall health problems, the many interrelated factors responsible for these problems and the means by which they could be solved. The experience adds depth, we think, to the student's medical education which has value no matter what type of practice he ultimately chooses; the aim is not to recruit students into international medicine but rather to broaden their horizons for whatever medical pathway they choose. The following, the report of a husband and wife team who have spent three months in Argentina, is an example of what all students engaging in this elective are required to do.

The Flemings' Report

ARGENTINA is a country of twenty-three million people in the southern half of South America. Its one million square miles extend from semi-tropical jungles in the north to ice fields in the south and in between, the vast plains of the pampa.

The population of the country is 98 percent European descent of which half have emigrated to Argentina in the last 100 years from Spain, Italy, Portugal, Germany and England. The people have intermarried extensively, with each nationality leaving its mark on the nation's culture: Spanish is their language, slang is a mixture of Italian and Spanish and all the terms used in sports are English. The small Indian population is made up almost entirely of recent immigrants from Boliva, Peru and other South American countries.

About 25 percent of the population is employed in industry and 19 percent in agriculture. The central plain (25 percent of the nation's surface) has extremely rich soil with plentiful rainfall. There is no winter freeze and, when farmed intensely, it produces three wheat crops a year. The major part of it is used for beef cattle pasture. To the north of it, sugar cane and cotton are grown; to the west, orchards and vineyards; to the south, sheep. Argentina is developing its own iron, oil and gas resources. Its major exports are food and hides. Its imports are heavy machinery, aluminum, paper pulp, wood, steel and petroleum products. The nation manufactures its own autos, buses, tractors and small appliances. The per capita income is $800 or about one fourth that of the United States. Food, clothes, furniture and small appliances cost one third of U.S. prices, services are one fifth to one sixth and education (including university) is free. However, rent is equal to rent here and automobiles (due to a 100 percent tax) are twice as expensive. Because of rapid inflation the best home mortgages are 30 percent for five years, with one half of the cost paid down. Consequently, the median age of marriage is four years later than in the United States.

We spent our clerkship in the city of La Plata, (population 500,000, the capital of the province of Buenos Aires. This province is adjacent to the Federal District (capital city) of Buenos Aires, which has a metropolitan population of 8,000,000. La Plata is a planned city, laid out by the same architects who designed Washington, D.C. Its streets are wide, and parks and plazas are abundant. The provincial university and large provincial hospital are here. The people are 90 percent literate.

Our projects, while in Argentina, were an overall review of the country's health problems and resources, a study of the extent of Chagas-Mazza Disease in Argentina and of the country's program for the eradication of the disease.

Health problems and health resources were studied from available statistics and visits to hospitals, clinics and doctors. The health status of Argentina is midway between that of the United States and the overall status of Latin America. There is no acute shortage of doctors with a patient-doctor ratio of 670 : 1 (650 : 1 in the U.S.), but the distribution varies from 250 patients per doctor in provinces with major urban centers to 2,500 patients in provinces which are predominantly rural. There is one hospital bed per 180 inhabitants with a similar distribution concentrating the hospitals in the large cities. The result is that within metropolitan areas sophisticated health care is readily available, while in rural areas health care is a matter of traveling

†*Introduction by Hugh S. Fulmer, M.D., professor in the department of community medicine, University of Kentucky College of Medicine, Lexington*

**Senior medical students at the University of Kentucky, Lexington*



FIGURE 1. Shacks along a canal in one of the more than 200 villas miserias surrounding Greater Buenos Aires. This particular group of squatters occupies an area of four square blocks surrounded by industry and bisected by the sewage canal. Water is obtained from standpipes on the periphery which are supplied by the government.

10 to 50 miles by horse cart on dirt roads, which are not always passable, to see a nurse or doctor who will have very limited diagnostic and treatment facilities. When serious illnesses are seen in such areas they are sent to the urban centers for treatment. These rural provinces are statistically very healthy as most of the population affected with disease is not seen. When they are treated and reported it is by another province.

There are nine medical schools in the country. They have a seven year program of three pre-clinical and four clinical years. The medical student enrollment varies from 5,000 at the smaller universities to 30,000 at the largest. There are no admission tests, and there is a very high attrition rate. Ten percent of the graduating medical and dental students are women and 15 percent are from countries other than Argentina.

Medical outpatient care is almost entirely private. Of all hospital beds, 80 percent are government owned providing care on a "pay as you can" basis. Most of the private hospitals have their own insurance policies. Members pay monthly for the right to use the hospitals' facilities free when needed. There are only a few nationwide insurance plans. These are employer related so they are not available to everyone.

There is a shortage of ancillary medical personnel, especially registered nurses, laboratory, radiology and cardiology technicians. The hospitals are set up to be staffed by nurse's aides who mainly feed and wash patients. Vital signs are taken by doctors on their rounds. Other nursing care is provided by the patient himself or his family. Injections and IV's are taken care of by aides with special training. Schools of nursing have few graduates because hospitals are not prepared to pay them adequately, and as nursing is thought of as "bed pan carrying", it is a low prestige profession.

The birth and death rates are quite comparable to the United States, but the causes of death, life expectancy and age specific death rates are different. In 1964 Argentina had a death rate of 56.7 per 100,000 from infectious disease and enteritis while the U.S. rate was 13.0 per 100,000. In the same year the U.S. death rate from strokes, heart disease and hypertension was 453.2 per 100,000 while the rate in Argentina was 146.8 per 100,000. Our higher death rate from these causes comes from our five year longer life expectancy, lower death rates from infectious disease, and the fact that many deaths from these causes in Argentina may be concealed under the diagnosis of "poorly defined state". The death rate from poorly defined states was 166.9 per 100,000 in Argentina and 13.2 in the U.S. That this is the fifth leading cause of death in Argentina is an indication of the number of persons who are not receiving medical care during their terminal illness. If smoking and air pollution continue at their present rate, Argentina will soon rival Britain and the United States in chronic bronchitis, emphysema and lung cancer.

Amongst the infectious diseases which have a higher incidence in Argentina were typhoid, diphtheria, whooping cough and polio, diseases which are preventable by immunization. Likewise, tetanus and rabies have a much higher incidence. These diseases are occurring in both urban and rural areas. There is no shortage of vaccines nor of personnel to administer them. Rather, neither the middle nor lower classes bring their children for immunizations. There are sporadic intensive immunization campaigns but no nationwide, constant, energetic program of vaccination.

There is a national ministry of health as well as a ministry in each province and in some of the large cities. None of these are related to one another except in voluntary cooperation. Each situation viewed

as a health problem by one of these ministries is handled by a separate program. The programs of a single ministry do not necessarily cooperate.

The National Program for the Eradication of Chagas-Mazza Disease is a good example of the strong and weak points of Argentina's public health programs. Chagas-Mazza Disease, also known as South American Trypanosomiasis, is a protozoal (Trypanosoma cruzi) infection of man spread by a hematophage (Triatoma) from man to man. The disease has an acute phase which varies from subclinical to fever, malaise, myositis, myocarditis and acute meningoencephalitis. The clinical disease is often fatal in children under two years of age. This initial period is followed by 10 to 30 years of asymptomatic infection. Protozoemia is not present after the first year, and the infection is manifest only as a positive serology and later by EKG abnormalities. The chronic phase presents as heart failure and or megaesophagus and megacolon. The disease shortens both life expectancy and productive years.

The trypanosome lives in the gut of the bug which has eaten the blood of an infected host and is excreted in the insect's feces. The bugs defecate immediately after eating, and the infection is acquired when the feces are rubbed into the bite wound, a cut or the conjunctiva. Dogs and cats are also hosts as well as wild rodents, armadillos and many cold blooded animals. In every country where the disease exists there are species of triatomes which live only in the homes and carry-on the human cycle. In the wild, man is only an accidental host. Most of the documented cases of human infection from non-domestic species have been in American soldiers.

Infected triatomes are distributed from the Rio Negro in Argentina throughout all of South and Central America to the southern United States. Seventy percent of Argentina has a climate suitable for them. The disease is endemic and the areas where the human habitations foster infestation with triatomes. Characteristically, these are rural, mud brick homes with thatched roofs but may be a well constructed home in the city whose shed is infested. Multiple studies in the past 20 years have shown that 90-100 percent of the homes in the arid rural area are infested. The triatomes have been 60-70 percent carriers of T.cruzi.

The program for eradication of the disease, begun in 1963, is based on destruction of the domestic form, Triatoma infestans, in Argentina. Each of the provinces which is cooperating with the program has its own director who is responsible for organizing teams of sprayers who, after an area has been mapped and every home numbered, camp in the area for a month systematically spraying each home and every article in it with insecticide. These same men also serve as teachers explaining to the families the dangers of the bug, and as epidemiologists taking a filter paper blood sample from a finger stick for serologic studies. The sprayers return three months later after eggs unharmed by the first spraying have hatched into larval forms. Inspection for reinfestation is done twice yearly.

The provincial director also organizes reporting, epidemiologic studies, diagnostic facilities and research.

We visited the program's director in the province of Cordoba, Doctor Julio Cichero, who is also the national director of the program. Cordoba is in the center of the country. The city of Cordoba lying in the center of the province is a modern community of 70,000, the center of the automobile industry. The southern part of the province is productive farmland. North of the city rises a mountain range beyond which is semi-arid desert which flourishes with olive orchards and pastures where it has been irrigated from mountain lakes. Both the desert and irrigated areas are endemic for Chagas' Disease. Studies done under the auspices of the program show 100 percent of the homes in the rural area infested and 40-50 percent of the homes infested in the towns which have sprung up around the olive processing industry. Serologic studies on the well population show 50 percent of the population under 10 years old infected and 85 percent of the population over 60 years. EKG abnormalities (complete or incomplete right bundle branch block) have a 3 percent prevalence in the population under 10 years of age and 35 percent prevalence in those over 60. (There is a 1-2 percent prevalence in the U.S. and Scandanavia due to coronary heart disease.) The length of time between the onset of EKG abnormalities and clinical disease is not known. So, it is not known whether those who already have EKG abnormalities at age 10 live to make up a part of the population over 60 with abnormalities. That is, the percent of the total population who will have heart disease may be greater than 35 percent.



FIGURE 2. A rural family in their mud brick dwelling in the hot, dry region where Chagas' disease flourishes. The man at the left is Doctor Julio Alberto Cichero, director of the National Program for the Eradication of Chagas Mazza disease.

We went with Doctor Cichero and Sr. Hernandez, an entomologist, on a camping trip to a previously sprayed area to inspect for reinfestation and to study the non-domestic triatomes living around human habitations. The possibility that other species of triatomes will take over the niche left by the eradication of T. infestans is a constant worry.

The area we visited was 50 miles from paved roads, phones, electricity or gas. The homes were one room buildings made of mud bricks with thatched roofs. Water from wind or horse driven pumps supplies a family vegetable patch. Herds of goats and sheep feed mainly on the leaves of succulents and spineless cactus as there is no grass. Children do go to school to age 12. Trees are sparse, small and stunted. Neither the terrain nor the economy offers possibilities for improved construction which would lower infestation. The people themselves were interested, questioning what sort of "chinches" we had found with our night lighting traps and bringing out other varieties of triatomes which they had caught in the area near their homes.

The effectiveness of the program will be hard to measure as the acute cases are predominantly subclinical, so incidence in the areas which have been sprayed cannot be determined. Prevalence of serologic positives in children under five will be studied when there are areas five years post-spraying.

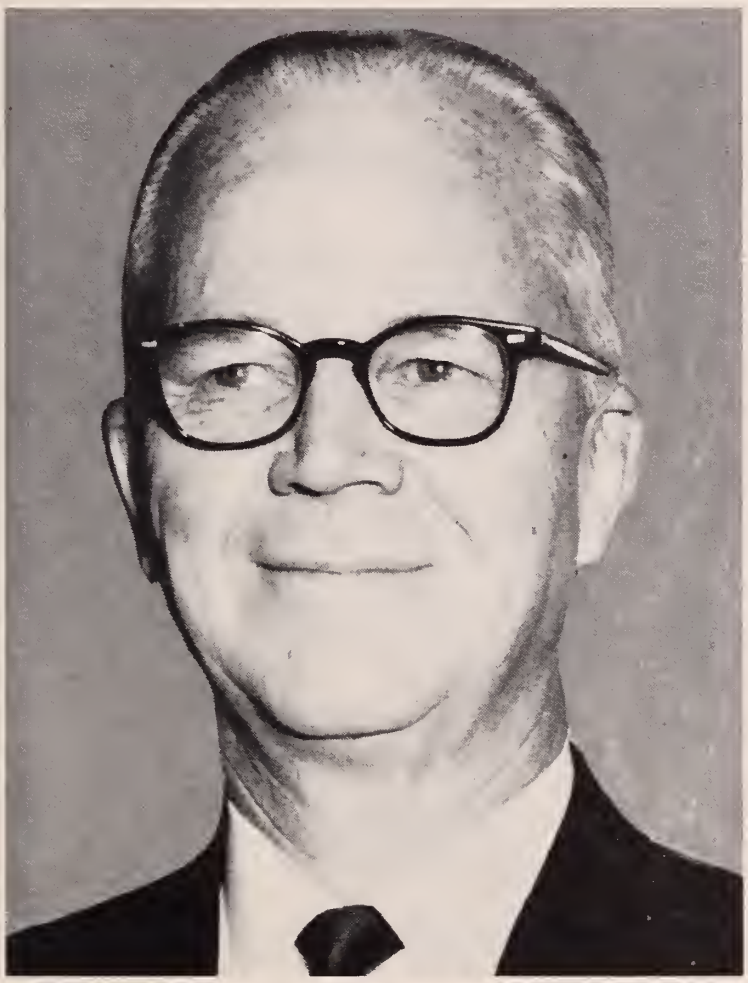
The major problems of the program are the climate and reinfestation. The area's scant rainfall all comes in the three months of summer turning the roads into quagmires. Persons migrating from adjoining provinces which have not yet begun spraying carry the bugs' eggs in satchels and trunks, reinfesting all the homes they pass through. The reinfestation rate has been 4 percent.

The total yearly budget of the program for the 11 participating provinces has been $800,000 or $2.00 per person protected. This year all 19 of the affected provinces have been brought into the program with a budget of $3,000,000. (Trucks and spraying equipment must be bought for the additional provinces.) This is 6 percent of Argentina's total government health expenditures, 0.03 percent of the national budget.

We were very impressed with the efficiency and effectiveness of the group working in Cordoba though dismayed at the poor cooperation between provinces and the consequent reinfestation. Also, between the sprayers and the persons checking for reinfestation all of the population of these areas have been contacted several times, yet it is the job of a different set of public health personnel to contact them for immunizations.

The people of Argentina are one of Argentina's major resources. They are literate, socially mobile and have a large middle class. The major problems are those of cooperation, organization, ability to make long range plans and lack of orientation toward some of their major health and economic problems.

In Memoriam



Mr. Joseph P. Sanford

1906-1968

Executive Secretary

Kentucky Medical Association



Joseph P. Sanford

MR. JOSEPH Pryor Sanford was born in Shelby County October 30, 1906. He died of a heart attack in the Kentucky Baptist Hospital March 25, 1968. The story of his life is a record of courage and tenacity of purpose such as has carried many an American youth from obscurity to meaningful living and worthy accomplishment in our complex and sometimes difficult society.

Joe's parents were farmers. He and his one brother and one sister attended public and Shelbyville High School from which he was graduated in 1925. That year he went to Georgetown College which he attended for two years. His college course was interrupted for a year of teaching in Brodhead High School. He enrolled in the School of Journalism at the University of Missouri in Columbia in 1928 and received his degree there in 1930.

He was news editor for the Warrensboro, Missouri Standard Herald for six months before entering the life insurance field in 1931 with Connecticut Mutual. This he continued until November, 1933 when he became general agent for the Medical Protective Company in a territory comprising Kentucky and 46 southern Indiana counties. He thereby came to know most of the physicians in his area and was invited to Headquarters Office of the Kentucky Medical Association in 1950.

The following year he became the first executive secretary of this Association, which position, involving multiple associated responsibilities, he held until his death. He rose in this activity to become president of the American Association of Medical Society Executives in 1966. Doctor Blasingame characterized him as the leading medical society executive secretary in the United States.

His position led him to many other appointments of importance:

Secretary and member, Board of Directors, Kentucky Physicians Mutual, Inc.

Secretary, Board of Trustees, Rural Kentucky Medical Scholarship Fund

Vice-President and member of the Board, Professional Convention Managers Association

Member of State Medical Journal Advertising Bureau Board of Directors

Member, Medical Exhibitors Association

Member and past president, Organization Executives Council, Louisville

Member, Legislative Committee, Kentucky Chamber of Commerce

First winner of the Kentucky Hospital Association's Community Service Award

He was a member of the Owl Creek Country Club—providing him with the recreation facilities he so much needed and dearly cherished but seldom found the time to enjoy. He maintained membership in the Downtown Louisville Kiwanis Club until the Association's office was moved to the suburbs of the city.

Joe Sanford was a devout and faithful Christian who would not let the complexities or demands of his work rob him of his church fellowship and duties. He was a charter member of two Baptist Churches and had served on the official board in four separate congregations. He and Elizabeth were members of the Davis Memorial Baptist Church in the later years. They were supportors of, contributors to, and solicitors for both Georgetown and Kentucky Southern Colleges. He was a member and secretary of the Baptist State Board of Child Care—coordinating board of social services and operator of three childrens' homes in the state.

On July 21, 1934 Joe married Elizabeth Macon Leiper of Bowling Green. They have one daughter, Mrs. Glenn Halcomb of 2916

North Verity Parkway, Middletown, Ohio. His home was his haven of quiet, and Bess his inspiration. They delighted to recount their varied experiences together as she shared with him his business travels and their occasional and brief vacations. She claims that during his early years with the Medical Protective they stayed in most of the county seat and hamlet hotels in the state. They came later to enjoy the more luxurious and restful accommodations of our beautiful state parks. Their last vacation together was at Kentucky Dam Village in March.

We of the editorial staff share deeply the loss of one who as managing editor did more than any other single or group of persons to bring our Journal to its present standard of excellence. His training in journalism combined with his devotion to the KMA Journal, his sense of exactness and his desire for perfection gave us an unexcelled group of conditions with which to work pleasantly and, we hope effectively. The stamp of his personality will, we trust, remain the masthead of the Kentucky Medical Journal.

For 17 years it was my privilege to work closely with Joe in a wide variety of endeavors. His sense of duty and devotion to it, his loyalty to his friends and coworkers, his charity toward those who believed differently, his patience under pressure and equanimity in turmoil were qualities rarely to be found and an inspiration to those about him. And withal he was a devout and humble follower of his Master—perhaps that helped explain him.

SAM A. OVERSTREET, M.D.

ORGANIZATION SECTION

Color TV Panel Sessions To Be Featured on Scientific Program At 1968 KMA Annual Meeting September 24-26 in Louisville

Five hours of panel discussions featuring color TV on a variety of medical topics will be a highlight of the 1968 Annual Meeting of the Kentucky Medical Association September 24-26 at Louisville's Convention Center, according to George F. Brockman, M.D., Greenville, KMA president.

Other events planned during the three-day session will include scientific presentations by a number of prominent out-of-state guest speakers, meetings of 16 specialty groups, two meetings of the KMA House of Delegates, 76 technical exhibits, scientific exhibits, an Orientation Program for new members and a meeting of the Woman's Auxiliary to KMA.

The opening session September 24 will include a color TV discussion of "Respiratory Diseases" moderated by Peter Bosomworth, M.D., Lexington. On September 25 two sessions are scheduled. The morning program of color TV will concern "Office Examinations" moderated by Fred Rainey, M.D., Elizabethtown. The afternoon program will be devoted to "Emergency Medical Care" moderated by William T. Rumage, Jr., M.D., Louisville. "Human Sexuality" will be the topic of the September 26 color TV discussion, moderated by John W. Roddick, M.D., Lexington.

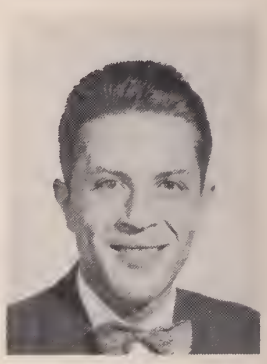
The September 24 opening session will feature talks by Jerold Lucey, M.D., Burlington, Vermont, guest of the Kentucky Chapter of the American Academy of Pediatrics, and Sidney Olansky, M.D., Atlanta, Georgia, guest of the Kentucky Dermatological Society. Doctor Lucey will discuss "Recent Advances in the Care of Newborn Infants." Doctor Olansky's topic will be "Syphilis Management, 1968."

A professor of pediatrics at the University of Vermont College of Medicine, Doctor Lucey graduated from New York University College of Medicine in 1952. He is a fellow of the American Academy of Pediatrics, chairman of its Committee on Fetus and Newborn, and a consultant on the National Board of Medical Examiners. His major research interest is the etiology of neonatal jaundice and kernicterus. His extensive study in this area has taken him to many parts of the world including Puerto Rico and Greece.

Doctor Olansky is a professor of medicine at Emory University School of Medicine and chief of the Section of Dermatology. He received his M.D. degree from Glasgow University, Scotland, in 1940. Doctor Olansky is on the Board of Directors of the American Academy of Dermatology and Syphilology and is a member of the National Serology Advisory Committee to the Surgeon General of the Public Health Service. He is the author or co-author of 126 papers relating to venereal diseases and dermatology.



Doctor Lucey



Doctor Olansky

Further details on other speakers and highlights of the KMA Annual Meeting, including a complete program of events, will be carried in the next three issues of The Journal.

KMA INTERIM MEETING

Since the 1968 KMA Interim Meeting took place at press time, The Journal was unable to carry details in this issue. Complete information, including pictorial coverage, will appear in the June issue.

Actions of Ky. General Assembly Summarized by Dr. Rainey

More than 1,200 bills and resolutions, of which approximately 10 per cent related to health matters, were introduced during the 1968 General Assembly which ended at 2:30 a.m., March 16, according to Fred C. Rainey, M.D., Elizabethtown, chairman for state affairs of the KMA Committee on Legislative Activities.

During the final two days of the 1968 session, a number of bills supported by KMA were passed. These include the following:

1. SB 291—A bill establishing a medical examiner's service program to assist coroners, upon request, in determining cause of death
2. SB 412—A bill authorizing the State Board of Health to license medical laboratories, regulate standards for personnel, performance and equip-

ment, and inspection, and to create an Advisory Committee.

3. HB 147—A bill providing for the inclusion as a licensing requirement for any practitioner of medicine, osteopathy, dentistry, podiatry, optometry, and chiropractic a minimum of 60 transferable semester units of study by an accredited college or university.
4. HB 408—An act relating to the procurement, processing and distribution or other use of human blood, makes blood a service rather than a commodity.
5. HR 86—A resolution calling for a study of the functions and composition of the State Board of Health.

Doctor Rainey expressed satisfaction with the defeat of HB 48, which would have included payment for chiropractors under the State's Workman's Compensation laws. He also expressed appreciation to state representative Mitchel Denham, M.D., for his vigorous opposition to this bill during the Assembly.

Other KMA supported bills passed by the Assembly include HB 26 and HB 347 pertaining to narcotic and dangerous drugs, HB 148 providing for penalties for the distribution of methyl alcohol for human use, HB 184 on implied consent, HB 260 concerning motorcycle safety, and HB 420 pertaining to measles and smallpox immunization.

In summing up the activities of the 1968 Kentucky General Assembly, Doctor Rainey expressed gratitude to the Committee on Legislative Activities, legislative key men, Doctor Denham, and staff members Gilbert Armstrong, KMA lobbyist, and Robert Cox who assisted Mr. Armstrong in Frankfort during the crucial days of the legislature. He urged all KMA members to continue to develop and maintain a friendly rapport with state representatives and senators.

Birth Defects Symposium Planned

The Second Annual Symposium on Birth Defects has been scheduled May 22 at the Sheraton Hotel, Louisville, according to Bernard Weisskopf, M.D., director of the Child Evaluation Center of the University of Louisville School of Medicine.

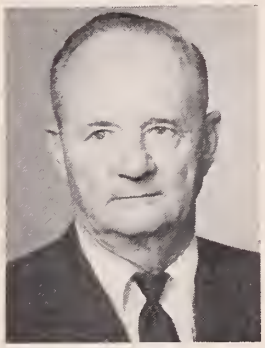
The Center is co-sponsoring the symposium with the Jefferson County Chapter of the National Foundation, March of Dimes. Members of the University of Louisville School of Medicine faculty, including Virginia Apgar, M.D., and Frank Falkner, M.D., will participate in the program. All physicians are invited to attend the symposium which will include a luncheon.

Dr. Pedigo Named to ACP Board

George W. Pedigo, Jr., M.D., Louisville, has been elected to a three-year term on the Board of Governors of the American College of Physicians effective in 1969. The election took place during the College's 49th Annual Session in Boston, April 1-5.

Dr. Johnston To Head Ky. Chapter American College of Surgeons

The Kentucky Chapter of the American College of Surgeons named Coleman C. Johnston, M.D., Lexington, president-elect and installed J. Duffy Hancock, M.D., Louisville, president, during its annual meeting April 4-6 at The Imperial House, Lexington.



Doctor Johnston

Sam Weakley, M.D., Louisville, was elected secretary-treasurer. New Council members are David A. Hull, M.D., Lexington, former secretary-treasurer of the Chapter, and Richard Grise, M.D., Bowling Green, immediate past president.

Doctor Johnston is past president of the Kentucky Surgical Society, the Kentucky Division of the American Cancer Society, the Fayette County Medical Society and the St. Joseph Hospital staff. He was a member of the Board of Governors of the American College of Surgeons from 1953 to 1962 and is currently on the Board of Directors of Kentucky Physician's Mutual, Inc.

The three-day meeting included a general session featuring a TV Operative Clinic, scientific sessions, meetings of specialty groups and a special nurses' program sponsored by the Chapter. Guest speakers were William E. Adams, M.D., Chicago, Ill.; Stuart S. Roberts, M.D., Columbus, Ohio; and Vincent L. Gott, M.D., Baltimore, Md.

KMA Holds Senior Day Programs For UL, UK Medical Students

More than 100 senior medical students from the University of Louisville and the University of Kentucky attended KMA's two annual Senior Day Programs March 18 in Louisville, and April 9 in Lexington. The students were the guests of honor at the two sessions which are sponsored by KMA each year in cooperation with the two medical schools and Jefferson and Fayette County Medical Societies.

The programs were arranged by Hoyt D. Gardner, M.D., Louisville, chairman of the Senior Day Committee, who presided at both sessions. KMA President George F. Brockman, M.D., Greenville, appeared on both programs, as well as a number of other Kentucky physicians who discussed aspects of medical practice of interest to new doctors.

Guest speaker Charles W. Jarvis, D.D.S., San Marcos, Texas, addressed University of Louisville students at the concluding dinner session of their program at the Executive Inn. University of Kentucky students heard guest speaker Dwight Wilbur, M.D., San Francisco, Calif., president-elect of the AMA, at their closing session at the Imperial House Motel.

This year's programs were the fourteenth and fifth for the University of Louisville and the University of Kentucky students respectively.

Dr. Downing Named President-Elect Of Kentucky Dental Association

The Kentucky Dental Association chose James M. Downing, D.M.D., Tompkinsville, president-elect during its 108th annual convention March 31-April 3 at the Brown Hotel, Louisville. Doctor Downing succeeds William Kranz, D.M.D., Lexington, who assumed the presidency of the Association during the meeting.



Doctor Downing

The Association presented its Distinguished Service Awards to Frank W. Jordan, D.M.D., and John L. Walker, Sr., D.M.D., both of Louisville. F. Darl Ostrander, D.M.D., Ann Arbor, Mich., president of the American Dental Association, spoke to KDA members April 3.

Doctor Downing graduated from the University of Louisville School of Dentistry in 1946. He has been active on KDA committees on local and state levels since 1947. In 1951 he served as president of the South Central Dental Society.

Medicine and Religion Panel Set

A panel discussion of "The Limits of Medical Responsibility in the Prolongation of Life," sponsored by the AMA Committee on Medicine and Religion, has been scheduled at 8:15 p.m., Sunday, June 16, at the California Masonic Memorial Temple during the Association's annual meeting in San Francisco.

Topics of discussion will include "Human Experimentation," "Machine Medicine," and "The Artificial Heart." All physicians are invited to attend this session.

KNA Sets Up Speakers Bureau

The Kentucky Nurses Association has established a speakers bureau in an effort to help inform allied health organizations and the public of the problems of the profession and the Association's ways of solving them, according to Nelle B. Weller, R.N., KNA executive director.

The bureau is composed of six nurses and their topics include health manpower, improvement of the practice of nursing, community nursing, and nursing education. Requests for speakers should be directed to the Kentucky Nurses Association, 1400 South First St., Louisville 40208.

KHA Elects Mr. Crozier at Mtg.; Installs Mr. Meriwether

The Kentucky Hospital Association named Elmer L. Crozier, Jr., Somerset, president-elect during its 39th Annual Meeting April 8-11 at the Kentucky Hotel, Louisville. Crozier has been administrator of the 113-bed Somerset City Hospital since 1954.



Mr. Crozier

Richard E. Meriwether, administrator of Muhlenberg Community Hospital, Greenville, was installed as president of the Association for a one-year term. Robert Walker, Paris, was elected treasurer. New trustees are Edward Horgen, Ashland, Ben Brewer, Lexington, and Gary Latham, Hopkinsville.

Crozier has served as a member-at-large on the KHA Board of Trustees for the past two years. He is a member of the American College of Hospital Administrators and a past president of the Cumberland Conference. Before coming to Somerset, Crozier was administrator of Cookeville General Hospital.

Approximately 1,700 health personnel attended the four-day session which included seminars, lectures, exhibits and social functions. Peter Jennings, ABC news correspondent, was guest speaker at the President's Luncheon. Other guest speakers included William H. McBeath, M.D., Lexington, director of the Ohio Valley Regional Medical Program, and R. Z. Thomas, president-elect of the American College of Hospital Administrators.

(Photo courtesy of The Courier-Journal, Louisville).

Inactive Health Manpower Proj. Seeks Physician Participation

Several thousand inactive health workers located in Kentucky have been contacted by a United States Public Health Service sponsored project (PH 108-67-229). Many of the inactives are seeking employment and have asked to be referred to prospective employers.

The majority of those seeking referrals are women, a number of whom are registered nurses. Other inactives seeking employment include dental hygienists, dietitians, inhalation therapists, medical records librarians, medical technologists, occupational therapists, pharmacists, physical therapists, radiologic technologists, social workers and speech therapists.

Physicians may request inclusion on the potential employers' list by sending information on the type of health worker needed and the conditions of employment to the project coordinator, Harold R. Rowe, Health Manpower, Box 5054, University of Kentucky, Lexington 40506.

Don't let monilia cut broad-spectrum therapy short...

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Use of broad-spectrum antibiotics can cause fungal overgrowth in the alimentary tract... and give rise to symptoms so troublesome that therapy must be prematurely stopped. Tetrex-F (tetracycline phosphate complex-nystatin) helps you circumvent this problem.

The nystatin can prevent overgrowth of monilia; the phosphate complex delivers tetracycline to the blood rapidly. Side effects are infrequent.

High-Risk Patients

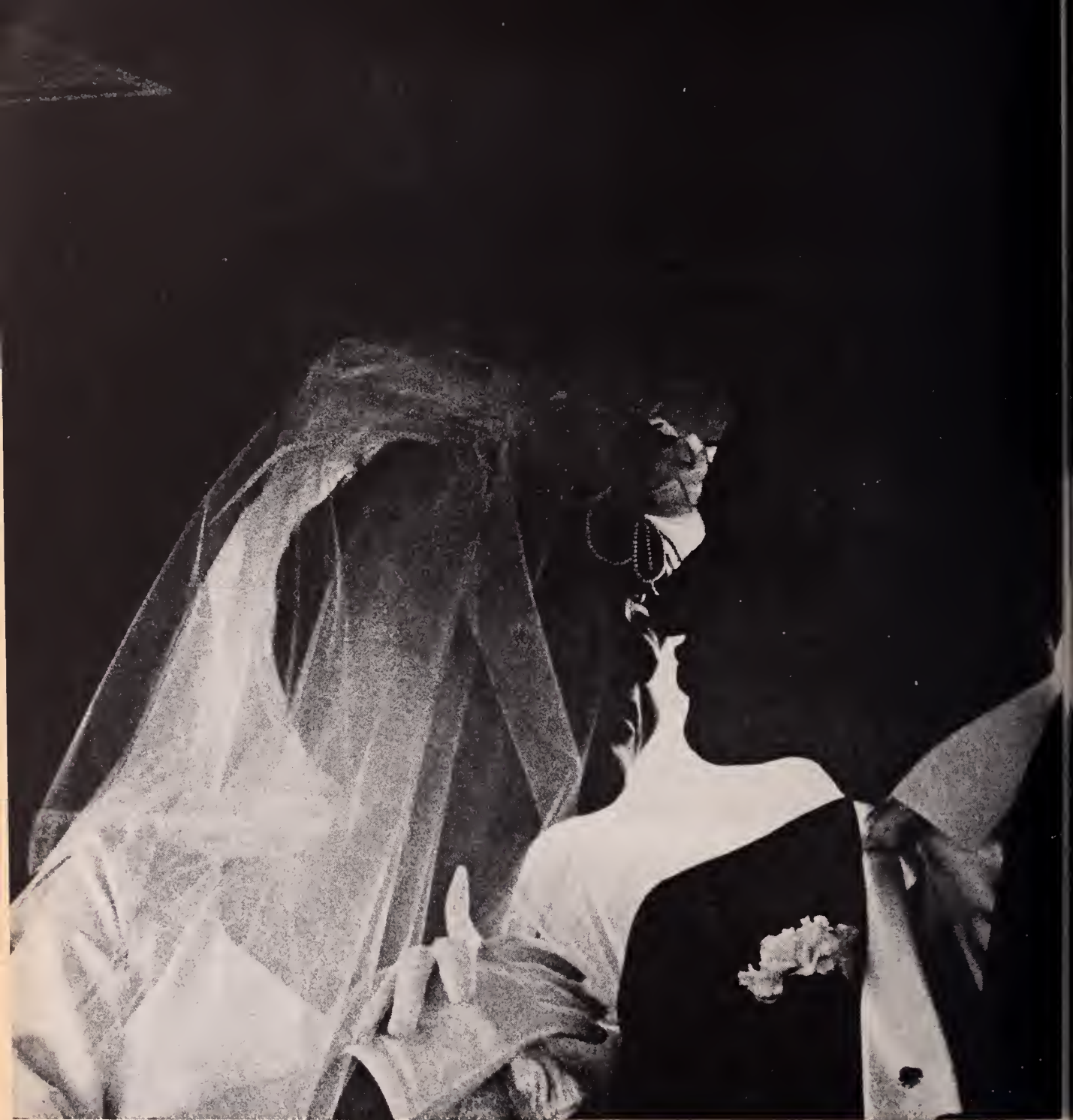
Tetrex-F (tetracycline phosphate complex-nystatin) is especially useful in patients most susceptible to fungal overgrowth during tetracycline therapy: (1) the elderly or debilitated, (2) young children, (3) the diabetic, (4) those on long-term tetracycline therapy, (5) those on steroid therapy, (6) those who have had moniliasis before, and (7) pregnant patients with a history of monilial vaginitis.

When you start with economical Tetrex-F (tetracycline phosphate complex-nystatin), you can complete the full course of broad-spectrum therapy with less chance of losing control elsewhere. A good start for a healthy finish.

PRESCRIBING INFORMATION. For complete information consult Official Package Circular. *Indications:* Infections of respiratory, gastrointestinal and genitourinary tracts and skin and soft tissues due to tetracycline-sensitive organisms, in patients with increased susceptibility to monilial infections. *Contraindications:* The drug is contraindicated in patients hypersensitive to its components. *Warnings:* Photodynamic reactions have been produced by tetracyclines. Natural and artificial sunlight should be avoided during therapy. Stop treatment if skin discomfort occurs. With renal impairment, systemic accumulation and hepatotoxicity may occur. In this situation, lower doses should be used. Tooth staining and enamel hypoplasia may be induced during tooth development (last trimester of pregnancy, neonatal period and childhood). *Precautions:* Bacterial superinfections may occur. Infants may develop increased intracranial pressure with bulging fontanels. In gonorrheal therapy, serologic tests for syphilis should be conducted initially and monthly for 3 months. *Adverse Reactions:* Glossitis, stomatitis, nausea, diarrhea, flatulence, proctitis, vaginitis, dermatitis, and allergic reactions may occur. *Usual Adult Dosage:* 1 capsule q.i.d. Continue for 10 days in Beta-hemolytic streptococcal infections. Administer one hour before or two hours after meals. *Supplied:* Capsules, bottles of 16 and 100. Each capsule contains tetracycline phosphate complex equivalent to 250 mg. tetracycline HCl activity and 250,000 units of nystatin. For Oral Suspension, 125 mg. tetracycline and 125,000 u. nystatin/5 ml., 60 ml. bottles.

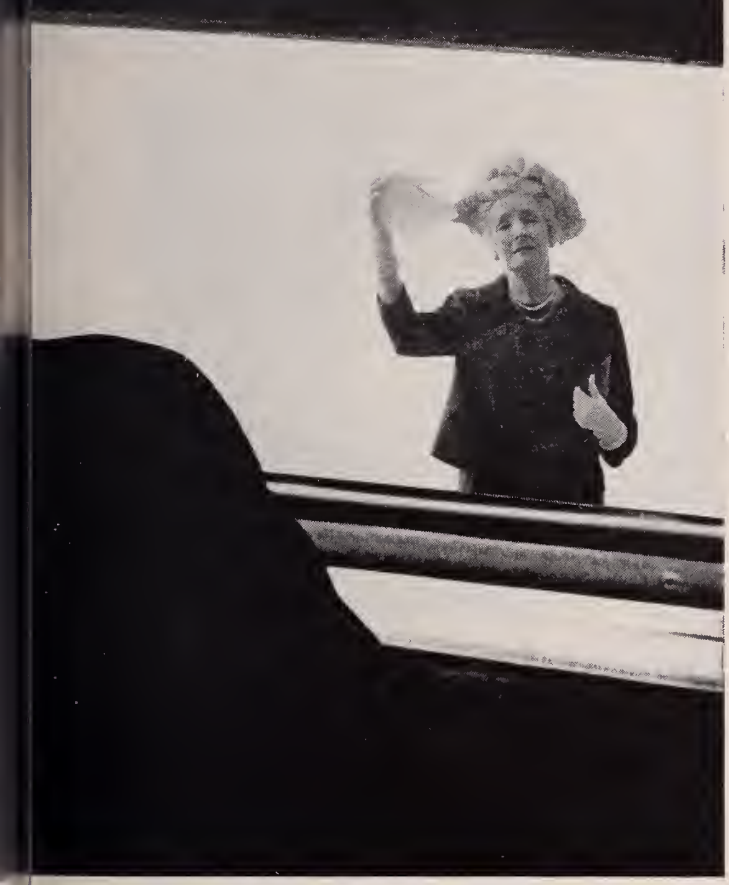
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Syracuse, New York 13201



Indications: Tofrānil is recommended for the treatment of depressive states of diverse psychopathology.
Contraindications: The concomitant use of Tofrānil and monoamine oxidase inhibiting (M.A.O.I.) compounds is contraindicated. Hyperpyretic crises or severe convulsive seizures may occur. Potentiation of adverse effects can be serious or even fatal. An interval of at least 7 days after M.A.O.I. therapy has been discontinued should be allowed before Tofrānil may be substituted. Initial Tofrānil dosage should be low, increases should be gradual, and the patient's progress should be carefully observed.
Warning: Clinical reports have suggested that there may be a risk of teratogenesis associated with the use of this compound during the first trimester of pregnancy. Unless, in the opinion of the prescribing physician, the potential benefits outweigh the possible risks, Tofrānil should not be used during the first trimester of pregnancy.
Cardiovascular complications, including myocardial infarction and arrhythmias, have occasionally occurred in susceptible individuals. Patients with cardiovascular disease should be given the drug only under careful observation and in low dosage.
Precautions: Since suicide is always a possibility in severely depressed patients and one which may persist until significant remission occurs, such patients should be carefully supervised during early treatment with Tofrānil. Some severely depressed patients may also require hospitalization and/or concomitant electroconvulsive therapy.
Because of its anticholinergic effect, caution should be observed in prescribing Tofrānil for patients with increased intraocular pressure.
In rare instances, transient cardi
arrhythmias have occurred in hyp
thyroid patients and in patients r
ceiving thyroid medication when
Tofrānil was added to the regime
Imipramine may block the pharm
cologic activity of guanethidine a
other related adrenergic neuron-
blocking agents.
The drug is not recommended at
present time in patients under 12
of age.
Adverse Reactions: Dryness of th
mouth, tachycardia, constipation
turbances of accommodation, sw
ing, dizziness, weight gain, urina
frequency or retention, nausea a
vomiting, peripheral neuritis, mil
parkinson-like syndrome, tremor
rare cases of falling in elderly pa
tients, confusional states (with su
symptoms as hallucinations and
orientation), activation of psycho
schizophrenics and agitation (inc

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Tofrānil often relieves symptoms of depression.

As maintenance therapy during the active phase of depression, it may help prevent relapse.

The use of Tofrānil in patients receiving M.A.O.I.'s is contraindicated.

In patients with cardiovascular disease, hyperthyroidism or increased intraocular pressure; or in those receiving anticholinergics (including antiparkinsonism agents), thyroid medication, or antihypertensive adrenergic neuron-blocking agents; and in those in their first trimester of pregnancy, the special precautions listed in the prescribing information should be carefully observed.

Toxic reactions severe enough to require discontinuation of Tofrānil are uncommon. However, for complete details, please refer to the full prescribing information.

Tofrānil® imipramine hydrochloride Geigy

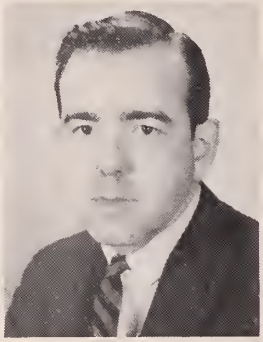
omanic and manic episodes) ay require dosage reduction addition of a tranquilizer or ary discontinuation of the drug, form seizures, orthostatic nsion and substantial blood e fall in hypertensive patients, , transient jaundice, bone mar- pression including agranulocy- ensitization and skin rash ng photosensitization, eosino- nd mild withdrawal symptoms len discontinuation after pro- treatment with high doses. nal hormonal effects (im- , decreased libido, and estro- ffects) may be observed. e-like effects may be more nced (e.g. paralytic ileus) in ible patients and in those nticholinergic agents (includ- parkinsonism drugs).
ent Adult Dosage: Initially, daily, increased, if necessary, to 150 or 200 mg. Maintenance dosage may be lower, 50 to 150 mg. daily, if possible.
Geriatric and Adolescent Dosage: Initially, 30 or 40 mg. daily, which may be increased according to response and tolerance. It is usually unnecessary to exceed 100 mg. daily.
A lag in therapeutic response, lasting from a few days to a few weeks, should be expected. When dosage recommendations are already being followed, increasing the dosage does not normally shorten this latency period and may increase the incidence of adverse reactions.
Availability: Tofrānil: Round tablets of 25 and 50 mg.; triangular tablets of 10 mg. for geriatric and adolescent use; and ampuls, each containing 25 mg. in 2 cc. for I.M. administration.
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For complete details, please refer to the full Prescribing Information.

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Ky. Public Health Assn. Chooses President-Elect at Annual Mtg.

The Kentucky Public Health Association named William S. Wester, Frankfort, president-elect during its Twentieth Annual Meeting April 1-3 at the Kentucky Hotel, Louisville. Mr. Wester is the assistant director for research in the Legislative Research Commission.



Mr. Wester

Mrs. Nellie Meadows, Clay City, received the Association's individual service award for her support of health projects as a writer for the Winchester Sun. The group award was presented to the Younger Woman's Club of Barbourville for its participation in the establishment of a regional hearing center.

Mr. Wester assumed his position with the Commission this year. He was formerly in the State Department of Health as executive assistant to the commissioner from 1961 to 1964 and as deputy commissioner of administration from 1964 to 1968. He is a member of the Kentucky Welfare Association and vice president of the Kentucky Chapter of the American Society of Public Administrators.

Mrs. Sally Taylor of the Ashland-Boyd County Health Department assumed the presidency of the Association during the meeting. She succeeds Joseph Durbin, executive director of the Visiting Nurses Association, Louisville.

Twenty-Six Physicians Join Ky. Medical Association

The Kentucky Medical Association has added 26 new members to its roster, according to records of the membership department as of May 20.

New members include Gordon D. Betts, M.D., Somerset; R. Bailey Binford, M.D., Russell Springs; Roy R. Bontrager, M.D., Whitesburg; Kirk Bowman, Jr., M.D., Madisonville; Jerry W. Brackett, M.D., Richmond; Woody G. Burrow, M.D., Paducah; R. W. Carpenter, M.D., Morehead; E. S. Downs, M.D., Middlesboro; and Linda E. Fagan, M.D., Richmond.

Other new members are T. A. Garcia, M.D., Glasgow; William P. Glover, M.D., Middlesboro; John A. Green, M.D., Bowling Green; William C. Greer, M. D., Hopkinsville; Gordon Hollins, M.D., Harlan; Hal E. Houston, M.D., Murray; Harry B. Huntsman, M.D., Greensburg; Everett L. Kalb, M.D., Murray; Henry B. Keister, M.D., Mayfield; and Prue W. Kelly, M.D., Murray.

Also included among the new members are Robinson P. Kirkpatrick, M.D., Danville; V. Wayne Lowe, M.D., Madisonville; Jesse H. Meredith, M.D., Glasgow; Frank E. Reeder, M.D., Paducah; E. D. Roberts, M.D., Murray; W. Edgar Waltrip, M.D., Owensboro; and Wilbur H. Wilson, M.D., Cynthiana.

Journal Deadline Is 15th

For the information of all physicians and organizations planning to submit articles or news items to be included in The Journal, the deadline for receiving this information is always the 15th of the month preceding the month of issue. For example, material to appear in the July issue must be in the Journal office no later than June 15.

The Journal staff is always grateful for items submitted and appreciative of the cooperation shown by contributors of information to be considered for publication. Unfortunately, in many instances, we have not been able to include material because it was received after the deadline.

Dr. Gordon Lectures in London

Abraham M. Gordon, M.D., Louisville, recently returned from London, England, where he lectured at the Wellcome Museum and Library. His subject was "Abraham Lincoln and His Disorder—The Marfan Syndrome."

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Contraindications: Comatose states or the presence of large amounts of C.N.S. depressants.

Precautions: Potentiation of C.N.S. depressants may occur (reduce dosage of such agents when used concomitantly). Use with caution in patients with chronic respiratory disorders. Antiemetic effect may mask overdosage of toxic drugs or obscure other conditions. Administer in pregnancy only when necessary. Because of possible drowsiness use cautiously and warn patients who operate vehicles or machinery.

Adverse Reactions: Drowsiness; dry mouth; nasal congestion; constipation; amenorrhea; miosis; mild fever; weight gain; hypotensive effects, sometimes severe with I.M. administration; epinephrine effects may be reversed; dermatological reactions; parkinsonism-like symptoms on high dosages (in rare instances, may persist); lactation and moderate breast engorgement (in females on high dosages); and less frequently, cholestatic jaundice (use cautiously in patients with liver disease). Adverse reactions occurring rarely, include: mydriasis; agranulocytosis; skin pigmentation; epithelial keratopathy; lenticular and corneal deposits (after prolonged substantial doses).

Available: Tablets, 10 mg., 25 mg., 50 mg., 100 mg. and 200 mg.; Spansule® capsules, 30 mg., 75 mg., 150 mg., 200 mg. and 300 mg.; Injection, 25 mg./cc.; Syrup, 10 mg./5 cc.; Suppositories, 25 mg. and 100 mg.

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In Memoriam

SPALDING ABELL, M.D.
Lexington
1914-1968

Spalding Abell, M.D., 54, a former Louisville physician, died March 21 at Veterans Hospital, Lexington, where he had lived for 16 years. Doctor Abell graduated from the University of Louisville School of Medicine in 1939. He served in the Army Medical Corps during World War II and practiced in Louisville until he became ill in 1952.

OSCAR L. CAWOOD, M.D.
Harlan
1906-1968

Oscar L. Cawood, M.D., 61, a semi-retired Harlan physician, died March 10 at his home. Doctor Cawood graduated from the University of Louisville School of Medicine in 1935. He had practiced in Harlan County for 32 years and was active in civic affairs.

HENRY H. SWEETS, JR., M.D.
Formerly of Lexington
1910-1968

Henry H. Sweets, Jr., M.D., 58, a former Lexington pathologist, died April 11 of a heart attack in Hannibal, Mo. where he was practicing. Doctor Sweets graduated from the University of Louisville School of Medicine in 1937 and practiced in Lexington from 1946 to 1950.

COUNTY SOCIETY REPORTS

McCracken

The regular monthly meeting of the McCracken County Medical Society was held March 27 at Boswell's Restaurant in Paducah.

Items discussed at the meeting included the local school board controversy which had been resolved, the death of KMA Executive Secretary J. P. Sanford, the Bylaws of the Woman's Auxiliary which were approved, and the decision to honor Julian Carroll and his wife on Doctor's Day.

Preceding the business meeting, guest speaker George Murphy, M.D., St. Louis, Mo., discussed "The Recognition and Prevention of Suicide." The talk was followed by a question and answer session.

KMA Lists New Officers Of County Societies

The following list of recently named officers of county medical societies had been received by KMA as of April 20, according to the records of the membership department.

Adair
President: Oris Aaron, M.D., Columbia
Secretary: W. Todd Jeffries, M.D., Columbia
Delegate to KMA: James C. Salato, M.D., Columbia
Alternate: Millard C. Loy, M.D., Columbia

Bracken
President: J. M. Stevenson, M.D., Brooksville
Secretary-Treasurer: D. E. Cummins, M.D., Brooksville
Delegate to KMA: J. M. Stevenson, M.D.
Alternate: D. E. Cummins, M.D.

Breckinridge
President: Harold W. Owens, M.D., Irvington
President-Elect: James G. Sills, M.D., Irvington
Vice President: Carol James, M.D., Hardinsburg
Secretary-Treasurer: William D. Hatfield, M.D., Irvington
Delegate to KMA: James G. Sills, M.D.
Alternate: Harold W. Owens, M.D.

Caldwell (Effective July 1)
President: Ralph Cash, M.D., Princeton
President-Elect: Frank Giannini, M.D., Princeton
Vice President: Kenneth Barnes, M.D., Princeton
Secretary-Treasurer: N. H. Talley, M.D., Princeton
Delegate to KMA: Ralph Cash, M.D.
Alternate: Frank Giannini, M.D.

Calloway
President: Charles D. Clark, M.D., Murray
Vice President: Conrad H. Jones, M.D., Murray
Secretary-Treasurer: Charles W. Mercer, M.D., Murray
Delegate to KMA: C. C. Lowry, M.D., Murray

Casey
President: Lewis E. Wesley, M.D., Liberty
Secretary-Treasurer: Cathryn V. Cornett, M.D., Liberty
Delegate to KMA: George W. Sweeney, M.D., Liberty

Christian
President: Phillip Vandeventer, M.D., Hopkinsville
Vice President: Gerald McCord, M.D., Hopkinsville
Secretary-Treasurer: Edwin R. Davis, M.D., Hopkinsville
Delegate to KMA: Norma Shepherd, M.D., Hopkinsville
Alternate: W. Faxon Payne, M.D., Hopkinsville

(*Continued on Page 482*)

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- ASTHMA
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Dispensed in bottles of 100 and 1000 tablets.

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MUDRANE GG ELIXIR—Four 5 cc teaspoonfuls is equivalent to one Mudrane GG tablet. Dosage adjusted to age and weight of child. Mudrane GG Elixir is for pediatric patients and those who think they cannot swallow tablets. Dispensed in pint and half gallon bottles.

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(*Continued from Page 481*)

Clay
President: J. L. Beckwell, M.D., Manchester
Vice President: Ira Wheeler, M.D., Oneida
Secretary-Treasurer: W. E. Becknell, M.D., Manchester
Delegate to KMA: W .E. Becknell, M.D.
Alternate: Ira F. Wheeler, M.D.

Crittenden
President: James O. Nall, M.D., Marion
Secretary-Treasurer: Richard M. Brandon, M.D., Marion
Delegate to KMA: Richard M. Brandon, M.D.
Alternate: James O. Nall, M.D.

Estill
President: C. E. Terry, M.D., Irvine
President-Elect: S. G. Marcum, M.D., Irvine
Secretary-Treasurer: Virginia Wallace, M.D., Irvine
Delegate to KMA: C. E. Terry, M.D.

Fayette
President: David B. Stevens, M.D., Lexington
President-Elect: David A. Hull, M.D., Lexington
Vice President: Leslie W. Blakey, M.D., Lexington
Secretary-Treasurer: Richard B. McElvein, M.D., Lexington
Delegates to KMA: John F. Berry, Jr., M.D., Lexington
Leslie W. Blakey, M.D.
M. Cary Blaydes, M.D., Lexington
Peter P. Bosomworth, M.D., Lexington
N. Lewis Bosworth, M.D., Lexington
Thomson R. Bryant, Jr., M.D., Lexington
Winston L. Burke, M.D., Lexington
Carl H. Fortune, M.D., Lexington
David A. Hull, M.D.
Irving F. Kanner, M.D., Lexington
Richard B. McElvein, M.D.
David B. Stevens, M.D.
Richard D. Floyd, M.D., Lexington
Alternates: Bush A. Hunter, M.D., Lexington
Carl H. Scott, M.D., Lexington

Franklin
President: James T. Ramsey, M.D., Frankfort
President-Elect: Carl Shroat, M.D., Frankfort
Secretary-Treasurer: Sanford L. Weiler, M.D., Frankfort
Delegates to KMA: Sanford L. Weiler, M.D.
Harold Johnson, M.D., Frankfort
Alternates: Carl Shroat, M.D.
Dallas C. Hagg, M.D., Frankfort

Garrard
President: O. S. Playforth, M.D., Lancaster
Vice President: Paul E. Lett, M.D., Lancaster
Secretary-Treasurer: Paul J. Sides, M.D., Lancaster
Delegate to KMA: Paul J. Sides, M.D.
Alternate: O. S. Playforth, M.D.

(*Continued on Page 484*)

digestive disorders

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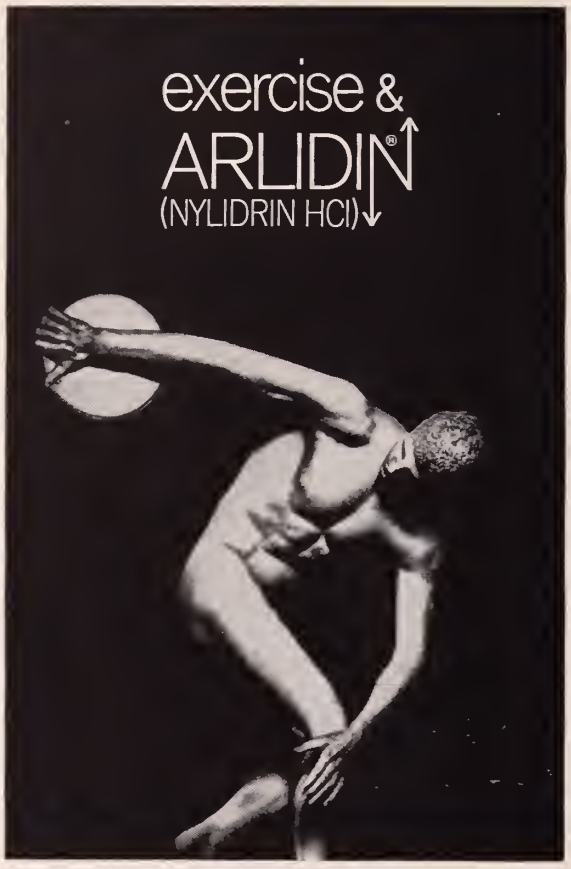
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(*Continued on Page 486*)

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Adverse Reactions: Side effects most commonly reported: drowsiness, fatigue and ataxia. Infrequently encountered: confusion, constipation, depression, diplopia, dysarthria, headache, hypotension, incontinence, jaundice, changes in libido, nausea, changes in salivation, skin rash, slurred speech, tremor, urinary retention, vertigo and blurred vision. Paradoxical reactions such as acute hyperexcited states, anxiety, hallucinations, increased muscle spasticity, insomnia, rage, sleep disturbances and stimulation have been reported; should these occur, use of the drug should be discontinued. Because of isolated reports of neutropenia and jaundice, periodic blood counts and liver function tests are advisable during long-term therapy. Minor changes in EEG patterns (low-voltage fast activity) observed during and after therapy and are of no known significance.

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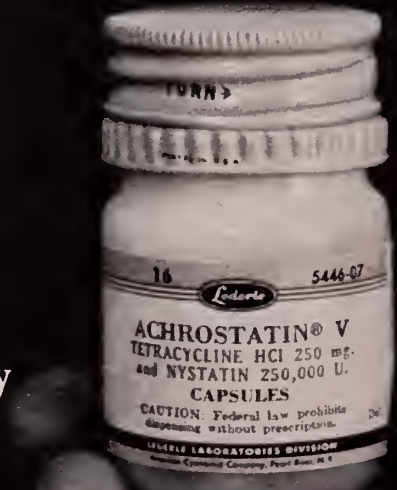
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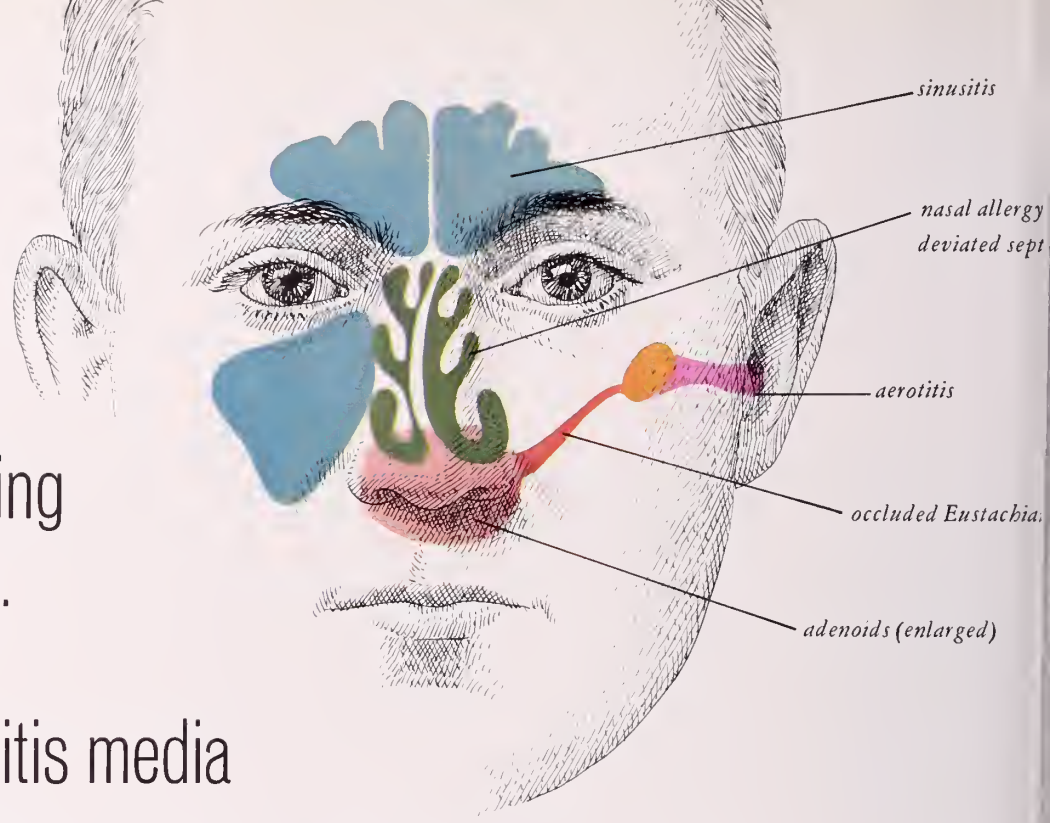
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this issue:
serous otitis media
an original article
by Robert H. Lofgren, M.D.



the complaining earache... key to serous otitis media

Robert H. Lofgren, M.D.
Associate Surgeon, Massachusetts Eye and Ear Infirmary, Boston, Massachusetts

Serous otitis media is probably the most common ear problem in children, especially in the wintertime. Diagnosis is usually easy in adults, but may be quite difficult in children, especially the very young child where one has to depend almost entirely on the physical findings.

The symptoms of serous otitis are a fullness in the ear, a mild hearing loss and mild earache. The earache can best be described as a "complaining earache" instead of a "screaming earache" as found in purulent otitis media. A young child may be irritable and pull at the ear. In milder cases, and as the ear recovers, gurgling and popping noises can be heard in the ear.

On examination one may see a yellow tympanic membrane and if a fluid level is present the diagnosis becomes easy. However, the eardrum may be dull gray, or slightly pink, or even perfectly normal. Pneumomassage using a Siegle otoscope or a closed-head electric otoscope must be done on both ears, otherwise the diagnosis will be frequently missed. Attempted movement of the drum with the pneumatic otoscope produces either a sluggish motion of the drum or no motion at all instead of the easily movable normal drum. The Rinne test is negative and there is a 15-20 decibel conductive hearing loss. The bone conduction may be better than normal and an air-bone gap may exist even with the air conduction within normal limits. Occasionally one finds a false nerve deafness on the audiogram when thi glue-like fluid causes immobility of both the ov and round window. Both conditions return to nc mal when the fluid is removed, but they make t interpretation of screening audiograms very difficu

There is no single cause for serous otitis. One f tor always present is blockage of the eustachi tube, but this alone is not enough to produce flu There must also be an inflammatory reaction. Bloc age of the eustachian tube may be caused by ma conditions. In children the most common cause enlarged adenoids. In the summer the next m common cause is allergy. Upper respiratory inf tions or influenza are common causes in the wint Nasal allergy, acute and chronic sinusitis, nasal s tal deformity and cleft palate can all cause eus chian tube obstruction. Some children may hav congenitally small eustachian tube, but fortunat they usually "grow out of the problem."

The first sign of a nasopharyngeal tumor is ofte serous otitis. One must always rule this out in adult who later in life develops repeated or pers ing serous otitis. Causes sometimes overlooked nasogastric tubes after surgery, simple obesity cardiorenal disease, which may produce congest in the mucosal lining of the eustachian tube. In cent years we have been seeing a new cause—ac otitis media, where the patient is adequately trea with antibiotics but where drainage has not b

ablished either through the eardrum or down the tachian tube. A sterile exudate is left in the mid- ear.

e inflammatory response may be caused by a rked negative pressure as in air otitis from flying, t may be from a mild bacterial or viral infection the middle ear. Serous fluid is a good culture dium and will frequently go on to purulent otitis dia, especially if the original blockage was caused an infectious process such as acute rhinitis or noiditis. When the infection heals there may be ring in the middle ear mucosa. Mucous glands elop in this tissue and pour out a thick mucoid terial. This ear usually looks normal until a umatic otoscope is used. The objectives in treat- serous otitis are to remove the obstructing agent l to provide drainage from the middle ear. Often ; can be accomplished by decongestants and nose ps. If large obstructing adenoids are present they uld be removed. Sinusitis should be treated with l decongestants or nose drops, plus antibiotics re indicated. Nasopharyngeal tumors should be ted. Allergies should be treated with antihista- es and, where indicated, by desensitization.

he fluid does not clear with medical treatment hin a week or two, a myringotomy should be e. If there is a question of active infection or if fluid looks purulent, as is seen at the conclusion acute otitis, cultures are taken. On adults this can done in the office without anesthesia. It is no re painful than an intravenous needle for a blood t. A good safe topical anesthetic has a tremen- s psychological value to the patient. Children der the age of 1 require no anesthesia. Between ages of 1 and 3 anesthesia is not absolutely es- tial although a general anesthetic may be used to id the child's possible mistrust at follow-up ex- inations. I usually do the myringotomy at the e time as the adenoidectomy if the adenoids are arged. Once drainage has been established with ongestants or by myringotomy, positive pressure ation of the middle ear is invaluable in forcing the serous fluid and keeping it from reforming. e patient can do this himself by performing the salva maneuver. This should be done several times a day, by taking a deep breath, holding the nose and blowing hard against the closed lips for a second or two.

In resistant cases where the fluid reforms as soon as the myringotomy heals, small polyethylene tubes are inserted through the myringotomy site. Insertion of the tubes, even in adults, usually requires an anesthetic. Good anesthesia can be obtained by infiltrating the canal wall with a local anesthetic, using a #27 needle. Once inserted the patient has no sensation of the tubes' presence. Be careful to caution the patient or parents not to allow any water to get into the ear canal while a myringotomy is open or a tube is in place. Water can be kept out by a pledget of lamb's wool in the ear canal or a cotton pledget thickly coated on the outside with petroleum jelly. I check these patients a week after a myringotomy to be sure it is healed and at two month intervals until the tubes have fallen out, usually within three to six months after insertion.

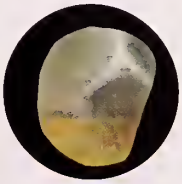
The mucoid type of fluid is so thick and tenacious that it is appropriately called a glue ear. It is aspirated only with difficulty through the eardrum, and occasionally must be removed through a tympanotomy. This thick, glue-like fluid is prone to recur, as the myringotomy usually heals long before the mucous membrane has returned to normal. Repeated myringotomies, as many as ten or twenty, were formerly required for this condition. Now polyethylene tubes are inserted initially when this thick, glue-like material is found. At times a subacute mastoiditis may accompany the serous otitis, which will necessitate a simple mastoidectomy before the condition can be eradicated. Usually the thin serous fluid readily responds to decongestants or to a myringotomy and removal of the eustachian tube obstruction. Occasionally, however, even serous fluid will repeatedly reform. For this, resection of the tympanic plexus of nerves which lies on the promontory of the middle ear has been carried out, as the tympanic branch of the glossopharyngeal nerve is the secretomotor nerve to the ear.

Failure to diagnose serous otitis is the most common cause of the recurrent, almost continuous otitis me-

Otoscopic Views



Normal



Acute Serous



Acute Purulent



Chronic Serous

dia seen in young children. In these cases a myringotomy will frequently provide a long-term cure without adenoidectomy or any other surgery. Failure to do this may allow the condition to go on to acute or subacute mastoiditis. Adhesive otitis media with scar tissue binding down the ossicles or tympanosclerosis may also result with permanent impairment of hearing. The prognosis for hearing with adhesive otitis or tympanosclerosis is usually poor. If the adhesions are removed, they reform, and the same is frequently true of tympanosclerosis even after a tympanoplasty. For many of these people a hearing aid is the only solution. The constant negative pressure in long standing serous otitis media may draw in either Schrapnell's membrane or the posterior superior portion of the eardrum forming a pocket to cause a chronic otitis media with cholesteatoma, which may not become apparent until twenty or thirty years later.

The non-medical complications of improper diagnosis or treatment may be even more serious. The irritable child, the frequent bouts of acute purulent otitis media with pain and fever, the expense of antibiotics and doctors, and the time lost from school or work affect the entire family.

In summary, serous otitis has many causes. There is a blocking of the eustachian tube and an inflammatory reaction in the middle ear mucosa, the latter usually caused by a mild infection. The treatment is to provide immediate drainage by decongestants and where necessary, by a myringotomy. The obstructing agent must be removed by surgery if it is adenoid or by oral decongestants, and antihistamines or nasal spray if it is an upper respiratory infection or allergy. Occasionally resistant cases require plastic tubes placed through the eardrum or other more radical surgery. Failure to treat properly leads to hearing loss which may be permanent, repeated acute otitis media or possibly even chronic otitis media with cholesteatoma.

References 1. Senturia, B. H. et al.; Middle Ear Effusions: Pathologic Changes of the Mucoperiosteum in the Experimental Animal, Ann. Otol. 71:632-648, 1962. 2. Grahne, B.; Serous Otitis Media, Acta Oto-Laryng. 58:1-8, 1964. 3. Sade, J.; Pathology and Pathogenesis of Serous Otitis Media, Arch. Otolaryng, 84:297-305, 1966. 4. Buckingham, R. A. and Ferrer, J. L.; Reversibility of Chronic Adhesive Otitis Media with Polyethylene Tubes, Laryngoscope 76:993-1014, 1966. 5. Chalat, N. I. and Lounsbury, E.; A Hearing Phenomenon and Serous Otitis, Laryngoscope 76:983-992, 1966. 6. Shucknecht, H. F.; Chronic Otitis Media in Children: A New Treatment, Clin. Pediat. 3:718-727, 1964. 7. Feuerstein, S. S.; Surgery in Serous Otitis Media, Laryngoscope 76:686-708, 1966. 8. Kapur, Y. P.; Serous Otitis Media in Children, Arch. Otolaryng. 79:38-48, 1964. 9. Silverstein, H., Miller, G. F., Jr. and Lindemman, R. C.; Eustachian Tube Dysfunction as a Cause for Chronic Secretory Otitis in Children, Laryngoscope 76:259-273, 1966.



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KMA Committee Reports

Technical Advisory Committee on Indigent Medical Care
(Title XIX of the Social Security Act)

Carroll H. Robie, Jr., M.D., Louisville, Chairman

KMA Headquarters Office **February 1, 1968**

The Technical Advisory Committee on Indigent Medical Care met February 1. Special guest at this meeting was Mr. Allen Brands, Pharmacy Liaison Representative of the Public Health Service in Washington, D.C., who discussed the duties of a special task force on prescription drugs, organized under the Department of HEW, to examine a number of factors involved with the use and purchase of prescription drugs. Mr. Brands requested information on the drug program in Kentucky.

Other guests at this meeting included staff members of the Medical Assistance Program in Kentucky, Mr. Evan Ray, Director; and Miss Jean Thomas, R. Ph., Pharmaceutical Representative.

Committee on School Health, Physical Education and Medical Aspects of Sports

O. B. Murphy, M.D., Lexington, Chairman

KMA Headquarters Office **February 1, 1968**

The Committee on School Health, Physical Education and Medical Aspects of Sports recently held its first meeting under the new KMA organizational structure and oultined its immediate and future committee plans. Each committee member presented the school health activities being conducted in his local area and suggested methods for up-grading these activities.

A lengthy discussion was held on governmental programs, and the need for strong county medical society health committees was stressed. The committee members also reviewed their plans to present an exhibit at the KEA Annual Meeting in Louisville during April and set April 11 as the next meeting of their committee.

Advisory Committee on Title XVIII (Social Security Act)

Paul J. Parks, M.D., Bowling Green, Chairman

KMA Headquarters Office **February 7, 1968**

The Advisory Committee on Title XVIII met on February 7 with Messrs. Duane Harper and Doug Sutherland of the Blue Cross Hospital Plan, Inc., Louisville, in attendance at the morning session to discuss Extended Care Facilities and Utilization Review.

Present at the afternoon session of this meeting was Mr. Don Smith, manager of the Lexington office of the Metropolitan Life Insurance Company, who discussed Metropolitan's program as fiscal agent for Part B of Medicare and the 1967 Amendments to the Social Security Act.

PUBLIC HEALTH PAGE

(Continued from Page 418)

legislation included the Kentucky Medical Association, the Kentucky Society of Pathologists, the Kentucky State Society of Medical Technologists, the Kentucky Hospital Association and the Kentucky State Department of Health. Implementation of the provisions of the Kentucky Medical Laboratory Act should contribute substantially toward improving the quality of laboratory practice in Kentucky.

An Analysis of 993 Patients

(Continued from Page 442)

References

1. Perlstein, M. A., Cerebral Palsy: Incidence, Etiology, Pathogenesis: *Archives of Pediatrics,* 79: 289, 1962.
2. Roboz, Paul, Etiology of Congenital Cerebral Palsy: *Archives of Pediatrics,* 79: 239, 1962.
3. Perlstein, *op. cit:* p. 292.
4. Roboz, *loc. cit.*
5. Nelson, W. E. (ed.), *Textbook of Pediatrics:* 8th edition, (Philadelphia: W. B. Saunders Company, 1964) p. 347.
6. Illingworth, R. S., The Diagnosis of Cerebral Palsy in the First Year of Life: *Developmental Medicine and Child Neurology,* 8: 178-194, 1966.
7. McGreal, D. A., The Early Diagnosis of Cerebral Palsy: *Applied Therapeutics,* 8: 232, 1966.
8. Paine, R. S., Current Practice in Orthopedic Surgery: Vol. 3 J. P. Adams, ed. (Saint Louis: C. V. Mosby Co., 1966) p. 44.

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Meprobamate: Drowsiness may occur and can be associated with ataxia; the symptom can usually be controlled by decreasing the dose, or by concomitant administration of central stimulants. Allergic or idiosyncratic reactions: maculopapular rash, acute nonthrombocytopenic purpura with petechiae, ecchymoses, peripheral edema and fever, transient leukopenia. A case of fatal bullous dermatitis, following administration of meprobamate and prednisolone, has been reported. Hypersensitivity has produced fever, fainting spells, angioneurotic edema, bronchial spasms, hypotensive crises (1 fatal case), anuria, stomatitis, proctitis (1 case), anaphylaxis, agranulocytosis and thrombocytopenic purpura, and a fatal instance of aplastic anemia, but only when other drugs known to elicit these conditions were given concomitantly. Fast EEG activity, usually after excessive dosage. Impairment of visual accommodation. Massive overdosage may produce drowsiness, lethargy, stupor, ataxia, coma, shock, vasomotor and respiratory collapse.

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NEWS ITEMS

V. Wayne Lowe, M.D., a pediatrician, is now associated with the Trover Clinic in Madisonville. Doctor Lowe graduated from Emory University School of Medicine in 1961 and has served in the U.S. Air Force for the past three years.

Norman E. Edwards, M.D., a general practitioner, is now associated with Lloyd M. L. Browning in Harlan. Doctor Edwards graduated from the University of Louisville School of Medicine in 1964.

Wally O. Montgomery, M.D., a general surgeon, is now practicing in association with Merle Fowler, M.D., and Theodore Myre, M.D., in Paducah. Doctor Montgomery graduated from the University of Louisville School of Medicine in 1962. He interned at Baptist Memorial Hospital, Memphis, Tenn., in 1962-63 and received his residency training at University of Louisville Hospitals from 1963-67.

Walden R. Smith, M.D., an anesthesiologist, recently opened an office in Nicholasville. Doctor Smith, a 1946 graduate of the University of Louisville School of Medicine, had previously practiced in Louisville, Ft. Knox and McDowell.

Lloyd M. L. Browning, M.D., a general practitioner, is now practicing at Riverview Hospital in Louisa. Doctor Browning graduated from the University of Louisville School of Medicine in 1964 and interned at Baptist Memorial Hospital, Memphis, Tenn., in 1964-65.

Jim L. Rogers, M.D., a 1961 graduate of the Medical College of Georgia, is now associated with the Trover Clinic in Madisonville, limiting his practice to obstetrics and gynecology. Doctor Rogers interned in Rome, Georgia, in 1962-63 and took his residency training at Emory University and Grady Memorial Hospital in Atlanta.

Garner E. Robinson, M.D., a pediatrician, is now practicing in association with Guy C. Cunningham, M.D., in Ashland. Doctor Robinson graduated from the University of Tennessee Medical School in 1961 and completed his internship at St. Thomas Hospital, Tenn., in 1962. He received his residency training at Baptist Hospital in Tennessee and at the University of Kentucky Medical Center where he was chief resident in 1965.

Wilbur H. Wilson, M.D., a general practitioner, is now associated with Don R. Stephens, M.D., in Cynthiana. Doctor Wilson graduated from the University of Cincinnati Medical School in 1964 and completed his internship at Cincinnati General Hospital.

John B. Rypstra, M.D., a general practitioner, has opened an office in the London Medical Arts Building. Doctor Rypstra, a 1947 graduate of the Indiana University School of Medicine, has practiced in Annville for 18 years.

P. Bruce Barton, M.D., a general practitioner, is now associated with W. M. Brown, M.D., in Corbin. Doctor Barton graduated from the University of Louisville School of Medicine in 1966 and completed his internship at Louisville General Hospital in June of this year.

G. Nelson Copeland, Jr., M.D. is now associated with Charles L. Preston, M.D., in Lexington, limiting his practice to obstetrics and gynecology. Doctor Copeland graduated from the University of Tennessee Medical School in 1960. He interned at Vanderbilt University Hospital and completed his residency training at Duke University Hospital.

Joseph R. Bowling, M.D., is now practicing in association with Dorval H. Donahoe, M.D., at Catlettsburg. Doctor Bowling, a general practitioner, graduated from the University of Kentucky College of Medicine in 1964 and completed his internship at St. Elizabeth Hospital, Dayton. He served for two years as a captain in the U.S. Army.

The Management of Sinus

(*Continued from Page 444*)

and x-rays are made. If further treatment is indicated, the antrum is irrigated on two different occasions with 1 percent saline solution and if pus persists in the return from the sinuses after two irrigations, surgery is considered indicated. The surgery aims at correction of mechanical obstruction along with an antral window. Very rarely is more extensive surgery, such as ethmoidectomy, sphenoidectomy, obliteration of the forntal sinus and other procedures, performed. A word of caution is necessary when dealing with an acute frontal sinusitis. According to Kratz and Thornell,[3] the incidence of intercranial complications with this disease is high. The acute case can be handled safely and without scarring by using the technique of Goodyear.[4] Goodyear trephined a small opening into the sinus where it approached the root of the nose.

Summary

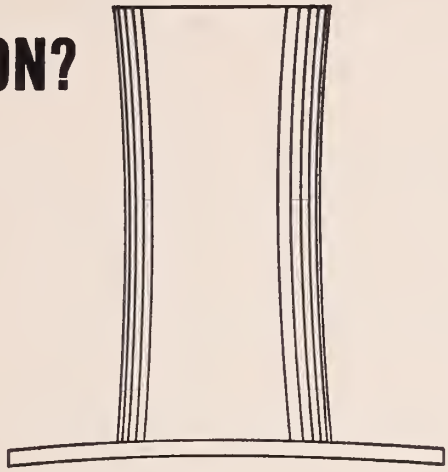
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Bibliography

1. Goldberg, Herbert B.; Hypoadrenal Corticism and Endocrinologic Treatment of Meniere's Disease. *New York State Journal of Medicine.* 62-377 Feb. 1962.
2. Atkinson, M.; Meniere's Syndrome. Observation on Vitamin Deficiency as the positive Factor, *Archives Otolryn.* 49, 51, 1949.
3. Kratz and Thornell, Acute Frontal Sinusitis, *Archives of Otolryn.* Vol. 65, pp. 105-110, 1957.
4. Goodyear H.M.; Surgery of the Frontal Sinus, *Laryngoscope;* 57, pp. 340-353, May 1947.

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MEDICAL SCHOOL NEWS AND VIEWS

The Kentucky Student Looks at Medical Education†

Richard Watkins*

MEDICAL education is in ferment. Or at least the more volatile portions of the mixture that make up the structure of medical education are in ferment. The concerned educator and the questioning medical student discuss at length what is to be done with the time-honored rites of becoming a physician.

Largely medical education is the victim of tradition—and understandably so, with its modern occidental roots in European medical schools of the 1400's. As a matter-of-fact, change-over in medical education bears a remarkable resemblance to the change-over in secondary education during the 'thirties and 'forties from the classical Greek and Latin education, which also had its modern roots in Renaissance Europe.

Then, argument against change was largely from authority and precedent. Authority said nothing as long as it was not challenged; when it was challenged it argued for education in Greek and Latin classics on the basis of the liberal effect of sharpening the mind. Undoubtedly classical studies did sharpen the mind. But this was a far cry from the original reason for their institution as the educational cornerstone of the Western world: First of all, Latin was the language of finance, of science and medicine, and of scholarship in general; secondly, the only literature worthy of study was in Latin and Greek; and finally, these necessary studies concomitantly sharpened the mind.

Today, after the slow but inexorable change that necessity imposes upon us, secondary school students still sharpen their minds, but do so within disciplines which are required both for liberal and practical reasons: Now one must have a notion of the scope of past literature, but a closer notion of the literature of today, since one must participate in today; a notion of the sweep of history, but a closer knowledge of the modern currents since one must row in those currents; today one must have knowledge of natural science. These things the student should learn as a simple practicality, and in learning them he achieves the classical goal of sharpening the mind.

Medical education would seem to stand today where classical liberal education stood 40 years ago—torn between the practical demands of a new time to know new things, and habituation and loyalty to an old way which has served admirably. But torn as we may be, the future course will be necessarily toward change.

It is obviously unnecessary for the future psychiatrist to memorize all details of the intrinsic muscles of the foot, simply because all physicians of yesterday were that familiar with the human anatomy—for the body of psychiatrically relevant knowledge today is larger than the entire body of yesterday's medicine. It is similarly inefficient that all internists should have, early in their training, memorized the layers of the *vas deferens*. That future internists, psychiatrists, health engineers, surgeons, epidemiologists, dermatologists, and general practitioners should all walk lockstep through precisely the same course in four years of medical school is a simple illogicity.

Yesterday's inflexible and encyclopediac approach to medical education is markedly inefficient in today's world—and when one considers its importance to the social order, inefficiency in the area of human health becomes irresponsibility.

† *This article is a theoretical discussion of medical education today. It will be followed by an article describing current developments in the curriculum at the University of Kentucky College of Medicine*

**Sophomore, University of Kentucky College of Medicine*

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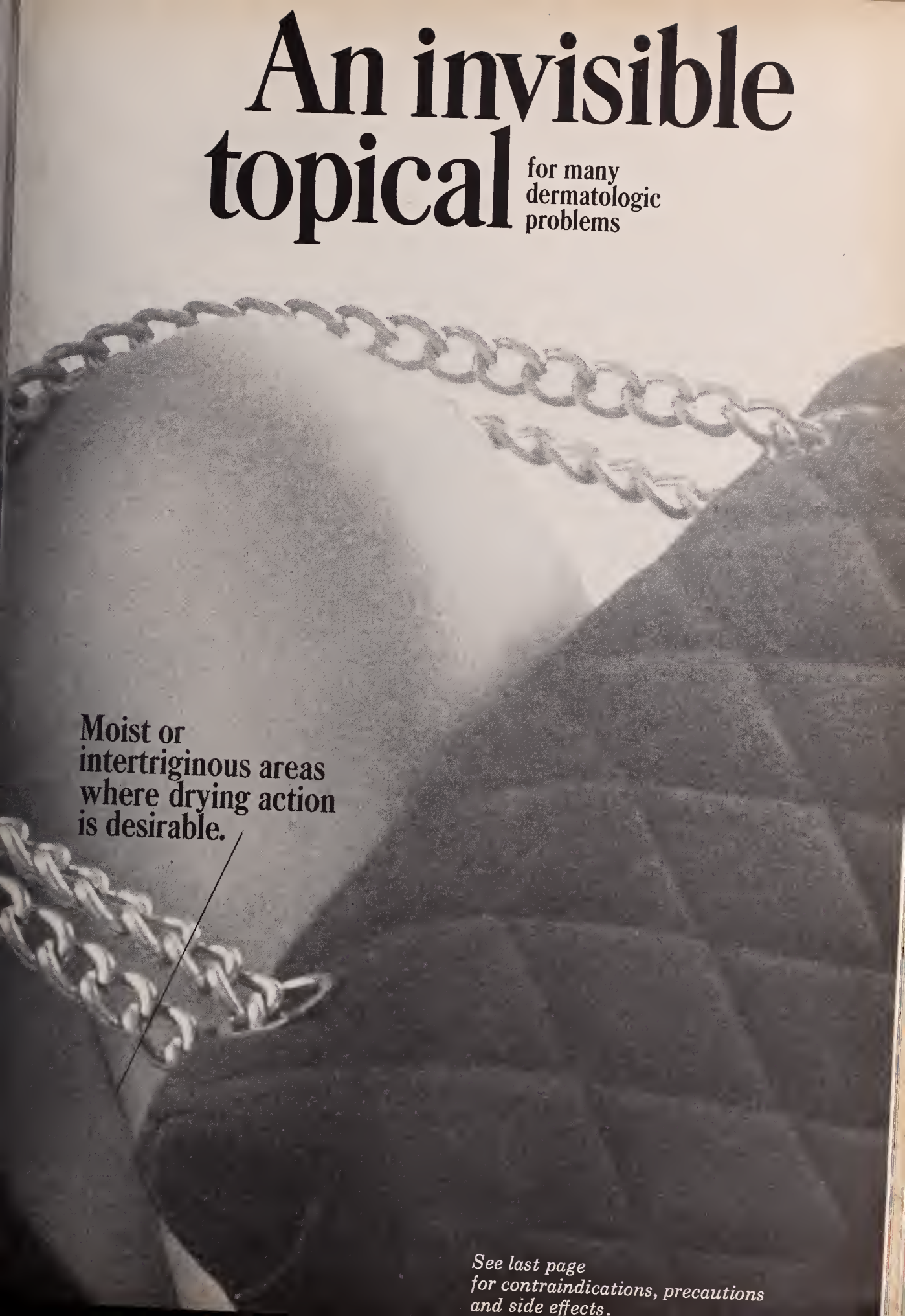
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Many medical organizations are setting dates for their fall and winter meetings. At the same time they are choosing the topics to be discussed, arranging for speakers and planning programs.

The Continuing Medical Education office of the Kentucky Medical Association would like to urge these societies and organizations to notify this office of these dates and topics so they can be added to the "Continuing Education Opportunities" calendar in *The Journal*. In this way conflicts in dates can be avoided and a wider audience can be informed of these upcoming meetings.

Please send such information, when available, to the KMA Continuing Medical Education Office, 3532 Janet Avenue, Louisville, Ky. 40205.

IN KENTUCKY

MAY

14 Thirteenth KMA Trustee District Meeting, 6:30 p.m., Ironton Holiday Inn, Ashland

16 Kentucky Thoracic Society, Annual Meeting and Scientific Session, Stouffer's Inn, Louisville

17-18 Kentucky Surgical Society Annual Meeting, Park Mammoth Resort, Park City

18-19 Kentucky State Association of Medical Assistants Sixth Annual Convention, Campbell House Inn, Lexington

22 Second Annual Symposium on Birth Defects, Sheraton Hotel, Louisville

22 Fifteenth KMA Trustee District Meeting, 4 p.m., Union College, Barbourville

23 Fourteenth KMA Trustee District Meeting, 4 p.m., Green Meadow Country Club, Pikeville

IN SURROUNDING STATES

MAY

13-17 Ohio State Medical Association Annual Meeting, Cincinnati-Exposition Center, Cincinnati, Ohio

19-20 Symposium on Dextrans, Texas Heart Association, Flagship Hotel, Galveston Island, Texas

JUNE

9-14 Medical Library Association, Brown Palace, Denver, Colorado

13-17 American College of Chest Physicians, Hilton Hotel, San Francisco, Calif.

16 AMA Committee on Medicine and Religion, "Limits of Medical Responsibility in the Prolongation of Life," California Masonic Temple, San Francisco, Calif.

16 American College of Legal Medicine, Clinical Meeting, 2-5 p.m., San Francisco Hilton Hotel, San Francisco, Calif.

16-20 American Medical Association 117th Annual Convention, Brooks Hall, San Francisco, Calif.

18-19 American Medical Women's Association Interim Meeting, Waldorf Astoria Hotel, New York, New York

21-22 Medical Writing and Journalism Course, American Medical Writers Association, San Francisco Medical Center, San Francisco, Calif.

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your patient can feel better while she's getting better

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Tetracycline HCl—Antihistamine—Analgesic Compound

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In bacterial/allergic u.r.i., ACHROCIDIN brings the treatment together in a single prescription—prompt relief of headache and congestion together with effective control of the tetracycline-sensitive organisms frequently responsible for complications leading to prolonged disability in the susceptible patient.

For children and elderly patients you may prefer caffeine-free ACHROCIDIN Syrup. Each 5 cc contains: ACHROMYCIN (Tetracycline) equivalent to Tetracycline HCl 125 mg.; Phenacetin 120 mg.; Salicylamide 150 mg.; Ascorbic Acid (C) 25 mg.; Pyrilamine Maleate 15 mg.

Average adult dosage: 2 tablets four times daily, given at least one hour before, or two hours after meals.
Contraindications: History of hypersensitivity to any component.
Warning: If renal impairment exists, even usual doses may lead to liver toxicity. Under such conditions, lower than usual doses are indicated and, if therapy is prolonged, serum level determinations may be advisable. Hypersensitive individuals may develop a photodynamic reaction to natural or artificial sunlight during use. Individuals with a history of photosensitivity reactions should avoid direct exposure while under treatment, which should be discontinued at first evidence of skin discomfort.
Precautions: Some individuals may experience drowsiness, anorexia, and slight gastric distress. If excessive drowsiness occurs, it may be necessary to increase the interval between doses. Persons on full dosage should not operate any vehicle. Use may result in overgrowth of nonsusceptible organisms. If infections appear during therapy, appropriate measures should be taken. Infections caused by beta-hemolytic streptococci should be treated for at least 10 full days to help prevent rheumatic fever or acute glomerulonephritis. Use of tetracycline during tooth development may cause discoloration of teeth.
Adverse Reactions: Gastrointestinal—anorexia, nausea, vomiting, diarrhea, stomatitis, glossitis, enterocolitis, pruritus ani. Skin—maculopapular and erythematous rashes (a case of exfoliative dermatitis has been reported); photosensitivity; onycholysis and discoloration of nails (rare). Kidney—rise in BUN, apparently dose related. Hypersensitivity reactions—urticaria, angioneurotic edema, anaphylaxis. In young infants, bulging fontanels following full therapeutic dosage has been reported. This has disappeared rapidly when drug was discontinued. Teeth—dental staining (yellow-brown) in children of mothers given tetracycline during the latter half of pregnancy and in children given the drug during the neonatal period, infancy, and early childhood. Enamel hypoplasia has been seen in a few children. Blood—anemia, thrombocytopenic purpura, neutropenia, eosinophilia. Liver—cholestasis (rare), usually at high dosage. If adverse reaction or idiosyncrasy occurs, discontinue medication and institute appropriate therapy.

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(chlordiazepoxide HCl)



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(in capsules)



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(in Libritabs™)
(chlordiazepoxide)

Before prescribing, please consult complete product information, a summary of which follows:

Indications: Indicated when anxiety, tension and apprehension are significant components of the clinical profile.

Contraindications: Patients with known hypersensitivity to the drug.

Warnings: Caution patients about possible combined effects with alcohol and other CNS depressants. As with all CNS-acting drugs, caution patients against hazardous occupations requiring complete mental alertness (e.g., operating machinery, driving). Though physical and psychological dependence have rarely been reported on recommended doses, use caution in administering to addiction-prone individuals or those who might increase dosage; withdrawal symptoms (including convulsions), following discontinuation of the drug and similar to those seen with barbiturates, have been reported. Use of any drug in pregnancy, lactation, or in women of childbearing age requires that its potential benefits be weighed against its possible hazards.

Precautions: In the elderly and debilitated, and in children over six, limit to smallest effective dosage (initially 10 mg or less per day) to preclude ataxia or oversedation, increasing gradually as needed and tolerated. Not recommended in children under six. Though generally not recommended, if combination therapy with other psychotropics seems indicated, carefully consider individual pharmacologic effects, particularly in use of potentiating drugs such as MAO inhibitors and phenothiazines. Observe usual precautions in presence of impaired renal or hepatic function. Paradoxical reactions (e.g., excitement, stimulation and acute rage) have been reported in psychiatric patients and hyperactive aggressive children. Employ usual precautions in treatment of anxiety states with evidence of impending depression; suicidal tendencies may be present and protective measures necessary. Variable effects on blood coagulation have been reported very rarely in patients receiving the drug and oral anticoagulants; causal relationship has not been established clinically.

Adverse Reactions: Drowsiness, ataxia and confusion may occur, especially in the elderly and debilitated. These are reversible in most instances by proper dosage adjustment, but are also occasionally observed at the lower dosage ranges. In a few instances syncope has been reported. Also encountered are isolated instances of skin eruptions, edema, minor menstrual irregularities, nausea and constipation, extrapyramidal symptoms, increased and decreased libido—all infrequent and generally controlled with dosage reduction; changes in EEG patterns (low-voltage fast activity) may appear during and after treatment; blood dyscrasias (including agranulocytosis), jaundice and hepatic dysfunction have been reported occasionally, making periodic blood counts and liver-function tests advisable during protracted therapy.

Usual Daily Dosage: Individualize for maximum beneficial effects. *Oral*—Adults: Mild and moderate anxiety and tension, 5 or 10 mg t.i.d. or q.i.d.; severe states, 20 or 25 mg t.i.d. or q.i.d. Geriatric patients: 5 mg b.i.d. to q.i.d. (See Precautions.)

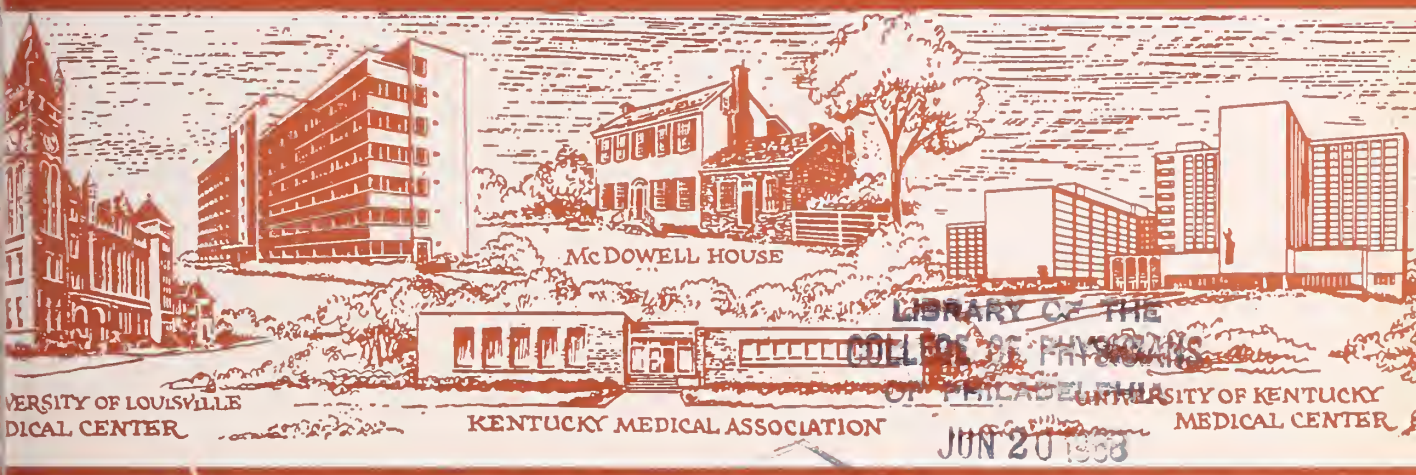
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THE JOURNAL

OF THE KENTUCKY MEDICAL ASSOCIATION



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KMA 1968 Annual Meeting—September 24-26
Convention Center, Louisville

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In untold thousands of epileptic patients... Dilantin has been, and continues to be, the bedrock of therapy.

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PRECAUTIONS: Periodic examination of the blood is advisable. Nystagmus in combination with diplopia and ataxia indicates dosage should be reduced. The possibility of toxic effects during pregnancy has not been explored. ADVERSE REACTIONS: Allergic phenomena such as polyarthropathy, fever, skin eruptions, and acute generalized morbilliform eruptions with or without fever. Rarely, dermatitis goes on to exfoliation with hepatitis, and further dosage is contraindicated. Gingival hypertrophy, hirsutism, and excessive motor activity are occasionally encountered. During initial treatment, side effects may include gastric distress, nausea, weight loss, nervousness, sleeplessness, feeling of unsteadiness. Macrocytosis, megaloblastic anemia, leukopenia, granulocytopenia, thrombocytopenia, pancytopenia, agranulocytosis, and aplastic anemia have been reported. Nystagmus, lymphadenopathy, lupus erythematosus, erythema multiforme (Stevens-Johnson syndrome), and a syndrome resembling infectious mononucleosis with jaundice have occurred.

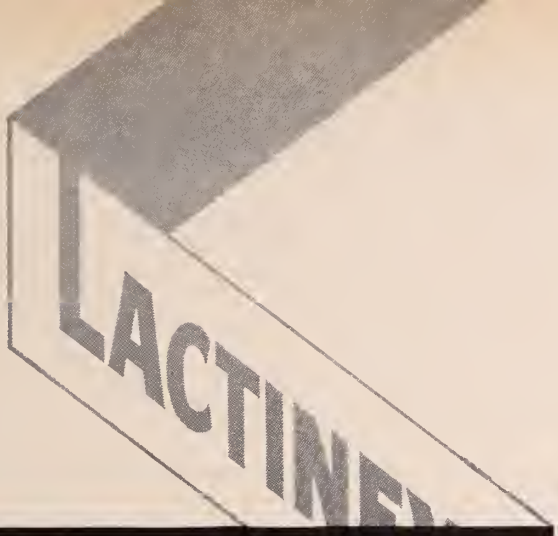
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■ to help restore and stabilize the intestinal flora

■ for fever blisters and canker sores of herpetic origin

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First introduced to help restore the flora of the intestinal tract in infants and adults,[1, 2, 3, 4] LACTINEX has also been shown to be useful in the treatment of fever blisters and canker sores of herpetic origin.[5, 6, 7, 8]

No untoward side effects have been reported to date.

Literature on indications and dosage available on request.

References:

(1) Siver, R. H.: CMD, *21*:109, September 1954. (2) Frykman, H. H.: Minn. Med., *38*:19-27, January 1955. (3) McGivney, J.: Tex. State Jour. Med., *51*:16-18, January 1955. (4) Quehl, T. M.: Jour. of Florida Acad. Gen. Prac., *15*:15-16, October 1965. (5) Weekes, D. J.: N.Y. State Jour. Med., *58*:2672-2673, August 1958. (6) Weekes, D. J.: EENT Digest, *25*:47-59, December 1963. (7) Abbott, P. L.: Jour. Oral Surg., Anes., & Hosp. Dental Serv., 310-312, July 1961. (8) Rapoport, L. and Levine, W. I.: Oral Surg., Oral Med. & Oral Path., *20*:591-593, November 1965.

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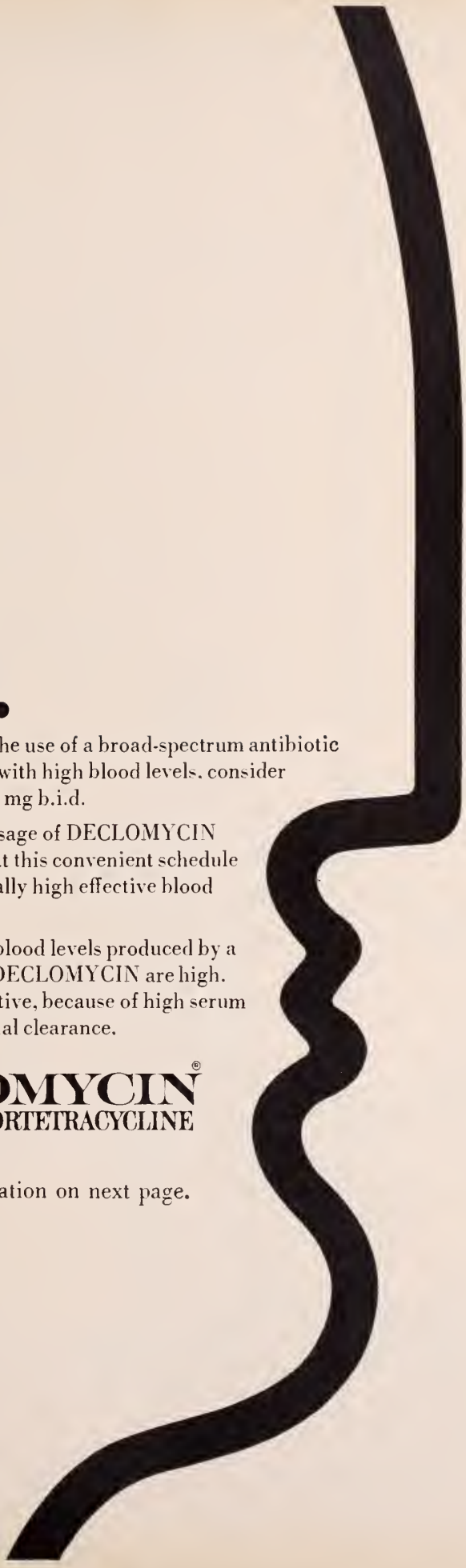
If your objective in the use of a broad-spectrum antibiotic is prolonged action, with high blood levels, consider DECLOMYCIN 300 mg b.i.d.

The maintenance dosage of DECLOMYCIN 300 mg can be kept at this convenient schedule because of its unusually high effective blood and tissue levels.

In clinical practice, blood levels produced by a therapeutic dose of DECLOMYCIN are high, prolonged, and effective, because of high serum binding and slow renal clearance.

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Lederle

Prescribing information on next page.



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b.i.d.

DECLOMYCIN Demethylchlortetracycline should be equally or more effective therapeutically than other tetracyclines when the offending organisms are tetracycline-sensitive.

Contraindication: History of hypersensitivity to demethylchlortetracycline.

Warning—In renal impairment, usual doses may lead to excessive accumulation and liver toxicity. Under such conditions, lower than usual doses are indicated, and, if therapy is prolonged, serum level determinations may be advisable. A photodynamic reaction to natural or artificial sunlight has been observed. Small amounts of drug and short exposure may produce an exaggerated sunburn reaction which may range from erythema to severe skin manifestations. In a smaller proportion, photoallergic reactions have been reported. Patients should avoid direct exposure to sunlight and discontinue drug at the first evidence of skin discomfort. Necessary subsequent courses of treatment with tetracyclines should be carefully observed.

Precautions—Overgrowth of nonsusceptible organisms may occur. Constant observation is essential. If new infections appear, appropriate measures should be taken. In infants, increased intracranial pressure with bulging fontanels has been observed. All signs and symptoms have disappeared rapidly upon cessation of treatment.

Side Effects—Gastrointestinal system—anorexia, nausea, vomiting, diarrhea, stomatitis, glossitis, enterocolitis, pruritus ani. Skin—maculopapular and erythematous rashes; a rare case of exfoliative dermatitis has been reported. Photosensitivity; onycholysis and discoloration of the nails (rare). Kidney—rise in BUN, apparently dose related. Transient increase in urinary output, sometimes accompanied by thirst (rare). Hypersensitivity reactions—urticaria, angioneurotic edema, anaphylaxis. Teeth—dental staining (yellow-brown) in children of mothers given this drug during the latter half of pregnancy, and in children given the drug during the neonatal period, infancy and early childhood. Enamel hypoplasia has been seen in a few children. If adverse reaction or idiosyncrasy occurs, discontinue medication and institute appropriate therapy.

Average Adult Daily Dosage: 150 mg q.i.d. or 300 mg b.i.d. Should be given 1 hour before or 2 hours after meals, since absorption is impaired by the concomitant administration of high calcium content drugs, foods and some dairy products. Treatment of streptococcal infections should continue for 10 days, even though symptoms have subsided.

In the treatment of syphilis a dosage schedule of a total of 12 to 18 Gm given in equally divided doses over a period of 10 to 15 days should be followed. Close follow-up observation of the patient is recommended, including appropriate laboratory tests, since demethylchlortetracycline has not had adequate evaluation in all stages of syphilis. Spinal fluid examination should be included as part of this follow-up.

Acute gonococcal anterior urethritis in males has been treated effectively with a single dose of 600-900 mg of DECLOMYCIN Demethylchlortetracycline. Individuals unable to tolerate large single doses due to gastrointestinal side effects may be treated with 150 mg every 6 hours for a minimum of 4 doses or 300 mg every 12 hours for a minimum of 2 doses. Females should be treated with a dosage of 150 mg every 6 hours or 300 mg every 12 hours until a cure is effected.

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The muscle relaxant that works before you write a prescription

Relieve painful skeletal muscle spasm in your office in minutes with a single 2 cc. injection of NORFLEX. Then, for sustained relief, write a prescription for NORFLEX tablets, 1 tablet b.i.d.

CONTRAINDICATIONS: Due to its anticholinergic action, NORFLEX should not be used in patients with glaucoma, pyloric or duodenal obstruction, stenosing peptic ulcer, prostatic hypertrophy or obstruction at the bladder neck, cardiospasm (megaesophagus) and myasthenia gravis. Use with caution in patients with tachycardia. Do not use propoxyphene (Darvon®) concurrently.

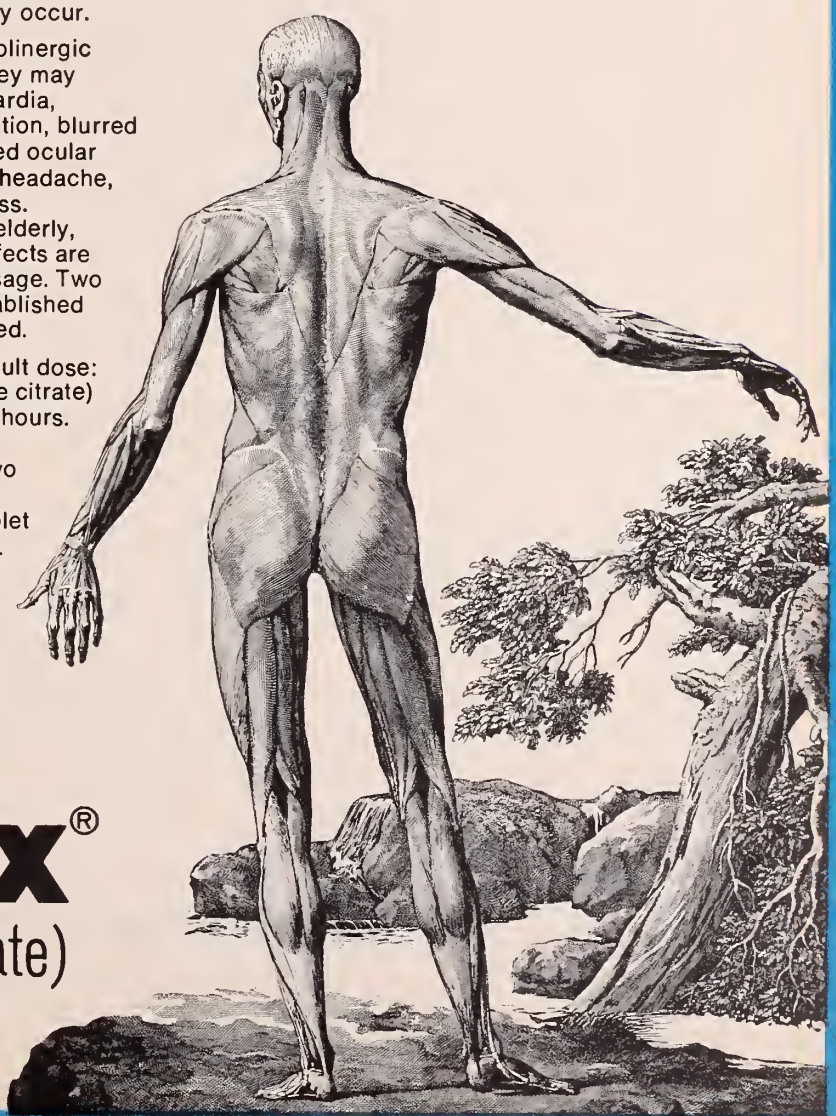
WARNING: Transient lightheadedness or dizziness following NORFLEX-INJECTABLE may occur.

SIDE EFFECTS: Due mainly to anticholinergic action and usually at high dosage. They may include dryness of the mouth, tachycardia, palpitation, urinary hesitancy or retention, blurred vision, dilatation of the pupil, increased ocular tension, weakness, nausea, vomiting, headache, dizziness, constipation, and drowsiness. Infrequently, mental confusion in the elderly, urticaria or other dermatoses. Side effects are usually eliminated by reduction in dosage. Two cases of aplastic anemia, with no established causal relationship, have been reported.

DOSAGE: **INJECTABLE** — Average adult dose: one ampul, 2 cc. (60 mg. orphenadrine citrate) I.M. or I.V. May be repeated every 12 hours. Relief may be maintained with one NORFLEX tablet b.i.d. **TABLETS** — Two tablets per day for adults, one in the morning, one in the evening. Each tablet contains 100 mg. orphenadrine citrate.

For full information, see Package Insert or P.D.R.

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Norflex®
(orphenadrine citrate)

MESSAGE FROM THE PRESIDENT



Welcome Aboard, Mr. Secretary

IN 1943, Senate Bill 1161 (Murray-Wagoner-Dingle) proposed a system of compulsory national medical insurance. One of the authors was an obscure young labor economist named Wilbur J. Cohen. In the years and the campaigns for Social Security medicine that followed, Wilbur J. Cohen, seldom in the public eye, climbed the ranks of the federal bureaucracy. By 1965, it was Under-Secretary Wilbur J. Cohen who masterminded the adoption of Medicare. Through all those years, I seemed to become progressively more of a public nuisance in writing and speaking on the perils and pitfalls of Social Security compulsory medical insurance.

In April 1968, the Honorable Secretary of HEW, Wilbur J. Cohen, was asked by Senator Ribicoff: "Do you see merit in a universal health insurance program?"

Secretary Cohen replied:

> "..... I strongly favored such a universal health insurance program as it was advocated in this country in the 1940's. I think that from the experience that we have had in the last two years, I have come to the conclusion that it is a much more monumental task than was first apparent..... I think it would be better to go at this problem in terms of looking at the priority needs that exist and in meeting those, than trying to find a kind of simple blueprint that would probably not fit all of these various conditions."

May we hope that this is finally acceptance of what I held to be an elementary premise—that it is much easier for a physician to understand social problems than it is for a social worker to master the problems of medical care.

George F. Bruckman

Doctor . . .

the VOLUNTARY SYSTEM is always SUPERIOR!

Here are 3 more big examples why you can recommend with confidence the

VOLUNTARY PLANS . . .

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1. Blue Cross and Blue Shield "65" Certificate

- **BENEFITS . . . *Improved* June 1, 1968**
- **DUES . . . *DEcrease* 15% next billing date**

These changes apply to ALL SUBSCRIBERS of this certificate, which adds to but does not duplicate Medicare benefits.

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- **DUES . . . *DEcrease* on next billing date for the following subscribers:**
  - Direct Pay
  - Groups of 50 or less
  - Farm Bureau

Subscribers in groups of 50 or more are adjusted according to an approved rating formula on their contract anniversary date

3. Blue Cross & Blue Shield Extended Benefits Endorsements

- **BENEFITS — *Improved* June 1, 1968 at no increase in dues.**

Benefits will be improved in all groups except where impossible because of the terms of a group contract.

DETAILED INFORMATION REGARDING THESE CHANGES HAS BEEN MAILED TO EVERY KENTUCKY PHYSICIAN

Your support in strengthening the VOLUNTARY PREPAYMENT SYSTEM is needed.

BLUE SHIELD® & BLUE CROSS®

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THE INSURANCE PAGE



Blues Increase Benefits; Lower Costs

IN THESE days when everyone is discussing the increasing cost of health care, it was very encouraging to learn that Kentucky Blue Cross and Blue Shield have been able to reduce dues and increase benefits on some of their contracts.

The Blue Cross and Blue Shield-65 contract which is designed to extend the coverage of Medicare for our elderly Kentuckians has made dramatic changes. The Blue Cross and Blue Shield-65 contract was first offered to Kentuckians on July 1, 1966, the effective date of Medicare. The coverage includes payment of the deductibles for covered hospital services as well as the co-pay features not covered by Medicare.

The Extended Benefits portion of the Blue Cross and Blue Shield-65 contract pays for the co-pay percentage not covered by Medicare for professional and certain other services after a $50 deductible.

The additional benefits being added include: Payment in full of the $20 per day deductible if the patient chooses to use the new in-hospital lifetime Medicare reserve; coverage in approved Extended Care Facilities; necessary private duty nursing up to $2,500 while a hospital in-patient; and a lifetime maximum benefit increase from $5,000 to $10,000.

The monthly dues of $5 per member for Blue Cross and Blue Shield-65 is being reduced to $4.25.

The effective date for the implementation of these new benefits will be June 1, 1968. All Blue Cross and Blue Shield-65, group, non-group and direct-pay members will receive notification of these changes by mail and adjustment of their dues beginning with the July 1, 1968 billing period and thereafter.

Additional coverage has also been added to the Extended Benefits contract which pays over and above basic Blue Cross and Blue Shield. Increased benefits are effective June 1, 1968 for these subscribers.

The most dramatic of these changes as it applies to physicians, is the increased surgical benefits which have been tied into Usual and Customary concepts and the in-hospital medical rider which has been increased from $3 per day to $5. All home calls were increased from $4 to $6 and office calls from $4 to $5.

Payment for necessary care rendered a member in a nursing home will be increased from $8 per day to $12. A new benefit is the addition of in-hospital consultations if a limited physical examination is necessary and $20 if a complete physical is necessary.

The maximum on Extended Benefits has been raised from $10,000 to $20,000 and it is now possible for the subscribers with this contract to continue on a direct basis when they leave a group plan.

Blue Shield Schedules C & D Subscribers who are enrolled on a direct pay basis, Farm Bureau or in a group with less than 50 subscribers will receive a rate reduction of about 10 percent for their current coverage. This rate reduction is effective July 1.

Groups over 50 are rated according to a formula approved by the Commissioner of Insurance and their experience is reviewed annually.

The rates for all Blue Cross and Blue Shield subscribers are based upon cost of care and utilization of services by members.

The Blue Shield staff is preparing a mailing which will be sent to your office to help answer any questions your patients might have.

WILLIAM W. HALL, M.D.

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Once a day, every day

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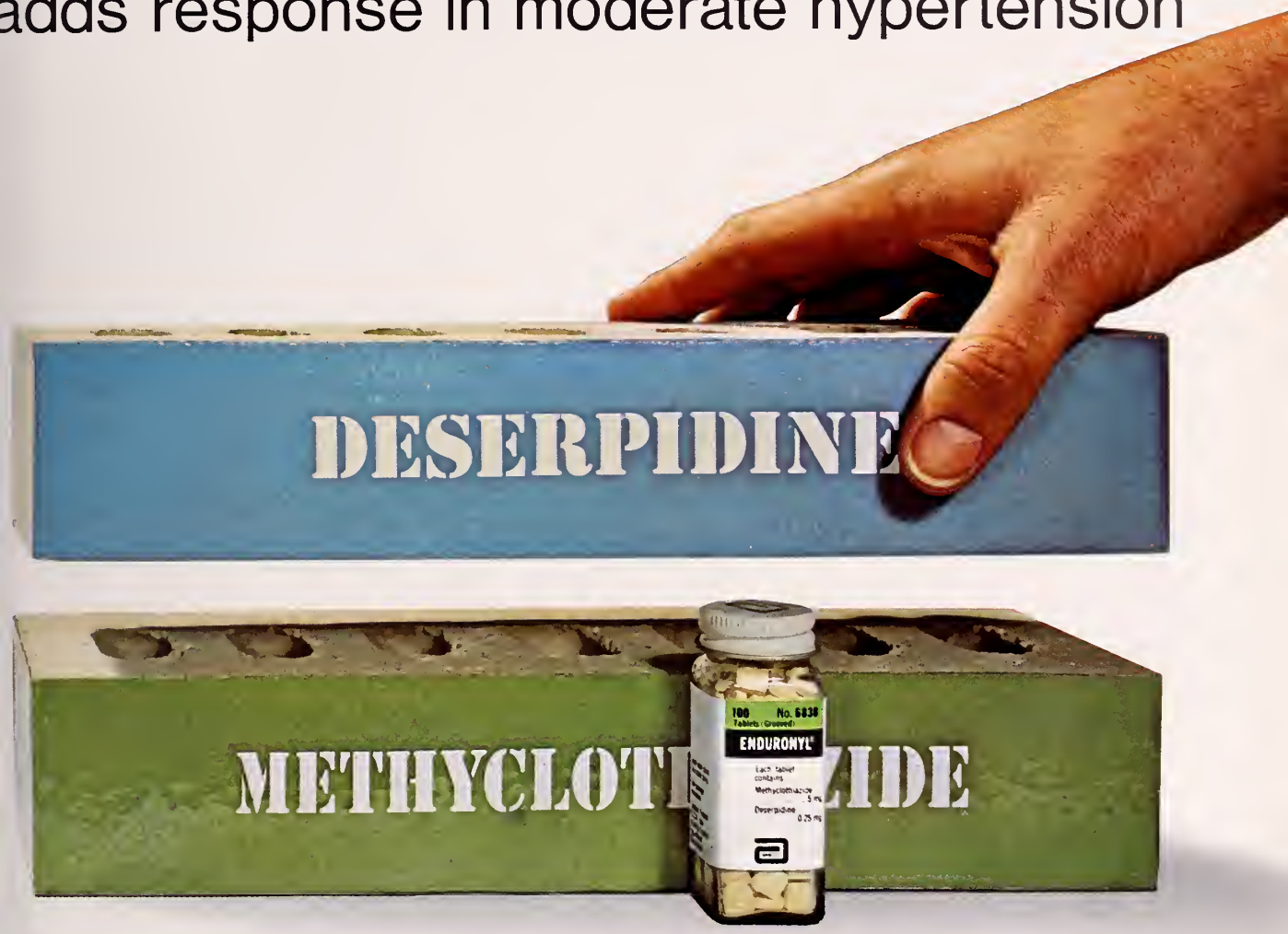
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See Brief Summary on final page of advertisement

Enduronyl: Its deserpidine component adds response in moderate hypertension



Less frequent rauwolfia side effects than with reserpine

When you wish to build further response, consider shifting to Enduronyl.

Enduronyl adds a building block of *deserpidine*. This is a purified rauwolfia alkaloid available only from Abbott. It adds good antihypertensive and tranquilizing activity. Yet its incidence of untoward effects, particularly lethargy and depression, is lower than with reserpine.

Enduronyl is available plain or Forte. The latter provides its variation where most helpful, by doubling the deserpidine.

Use Enduronyl for patients throughout the broad range of mild to moderately severe hypertension.

Once a day, every day

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METHYCLOTHIAZIDE 5 mg. with DESERPIDINE 0.25 mg. or (FORTE) 0.5 mg.

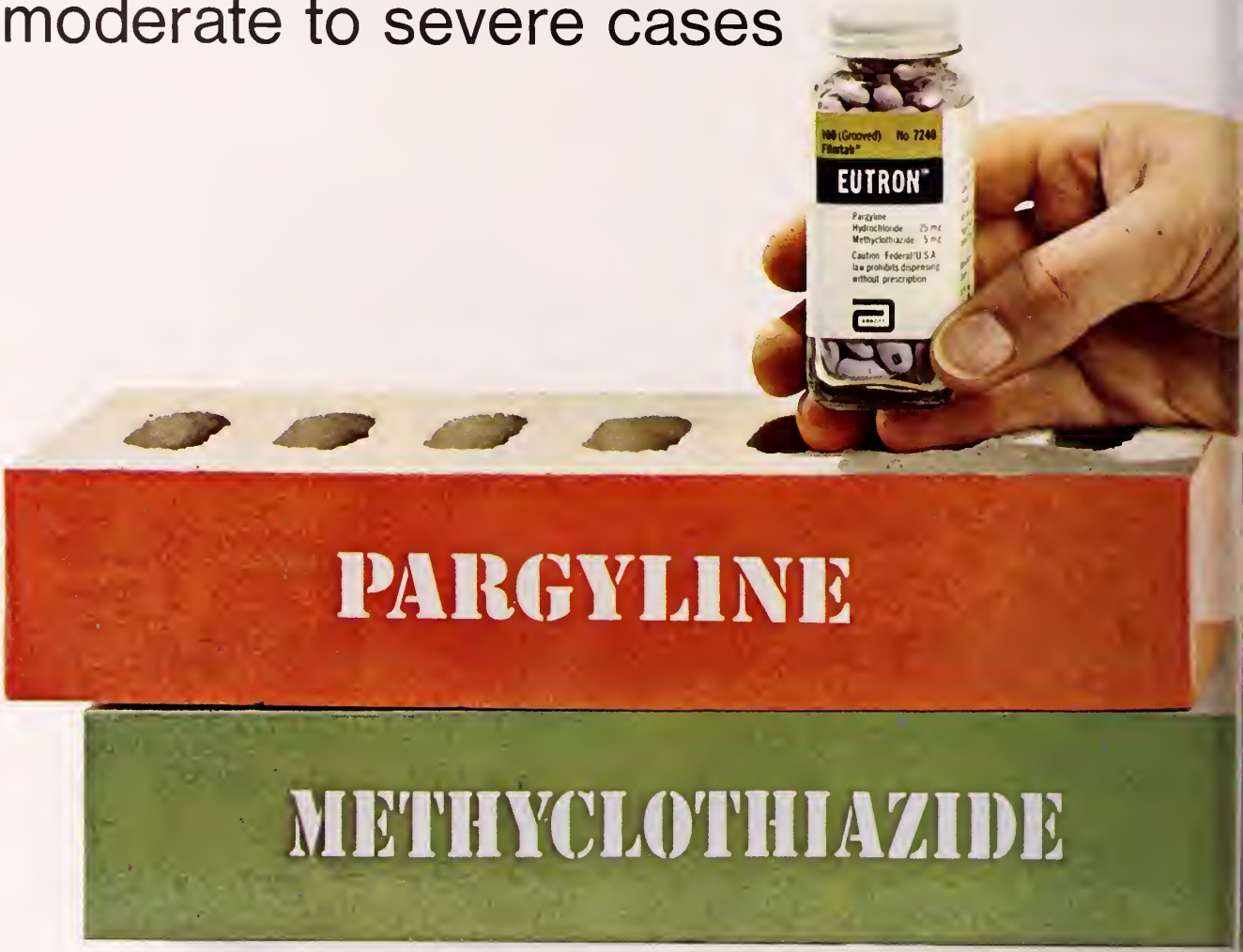
MILD TO MODERATE TO SEVERE



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Eutron: A unique combination for handling moderate to severe cases



Affords almost uniform diastolic reduction in all body positions

Eutron lowers diastolic pressures nearly equally, whether your patient is standing up or lying down.

Thus, in clinical trials, average *standing* diastolic readings were reduced from 112 pre-treatment to 90 post-treatment; *sitting* from 115 to 95; and *recumbent* from 112 to 94.

Note that following Eutron, the diastolic reductions were nearly alike in all three body positions.

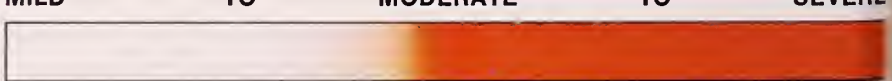
Use Eutron for managing your moderate to severe cases. Its building blocks enhance each other; hence lesser doses often suffice.

Once a day, every day

EUTRON™

PARGYLINE HYDROCHLORIDE 25 mg.
with METHYCLOTHIAZIDE 5 mg.

MILD TO MODERATE TO SEVERE



See Brief Summary on final page of advertisement

ENDURON® | ENDURONYL®

METHYCLOTHIAZIDE

Each tablet contains Methyclothiazide 5 mg. with Deserpidine 0.25 mg. or 0.5 mg.

Indications: Edema and mild to moderate hypertension (Enduron), and mild to moderately severe hypertension (Enduronyl). More potent agents, if added, can be given at reduced dosage.

Contraindications: Sensitivity to thiazides; severe renal disease (except nephrosis) or shutdown; severe hepatic disease or impending hepatic coma (hepatic coma due to hypokalemia has been reported in patients on thiazides). Do not use Enduronyl in severe mental depression, suicidal tendencies, active peptic ulcer, or ulcerative colitis.

Warnings: Consider possible sensitivity where there is history of allergy or asthma. If added potassium is indicated, dietary supplementation is recommended. Reserve enteric-coated potassium tablets for cautious use only when necessary, as they may induce serious or fatal small bowel lesions (stenosis with or without ulceration), cause obstruction, hemorrhage, and perforation often requiring surgery; discontinue them immediately if abdominal pain, distention, nausea, vomiting, or g.i. bleeding occurs. Neither Enduron nor Enduronyl contains added potassium.

Precautions: Use thiazides cautiously in severe renal dysfunction, impaired hepatic function or progressive liver disease; also in pregnancy (bone marrow depression, thrombocytopenia, and altered carbohydrate metabolism have been reported in certain newborn). In surgery, thiazides may reduce response to vasopressors, and increase response to tubocurarine. Antihypertensive response may be enhanced following sympathectomy. Watch for electrolyte imbalance (e.g., hyponatremia) in all patients. In hypokalemia (especially in digitalized patients) give supplemental potassium. In hypochloremic alkalosis, give supplemental chloride.

Use rauwolfias with caution in patients with history of peptic ulcer. Rauwolfias with anesthetics may produce hypotension and bradycardia. Discontinue Enduronyl two weeks before elective surgery. Consider vagal blocking agents during emergency surgery. In epilepsy, adjust anticonvulsant dosage. In electroshock, shorten stimulus strength and duration. In occasional patients with depressive tendencies, rauwolfias may precipitate severe mental depression that usually disappears when drug is stopped.

Adverse Reactions: Thiazide reaction include blood dyscrasias (thrombocytopenia with purpura, agranulocytosis, aplastic anemia); elevation of BUN, serum uric acid or blood sugar; anorexia, nausea, vomiting, diarrhea, headache, dizziness, paresthesia, weakness, skin rash, photosensitivity, jaundice, symtomatic gout, and pancreatitis. Cutaneous vasculitis in the elderly has been reported with other thiazides. Adverse effects with deserpidine are qualitatively similar to those with reserpine, but their incidence is lower. These include nasal stuffiness, abdominal cramps or diarrhea, nausea, headache, weight gain, reduced libido and potency, peptic ulcer aggravation, epistaxis, skin eruption, asthma in susceptible patients, electrolyte imbalance, excessive salivation, and a reversible Parkinson's syndrome. Excessive drowsiness, fatigue, weakness, and nightmares may signal mental depression. Thrombocytopenia, purpura, and a symptom manifested by dull sensorium, deafness, uveitis, glaucoma, and optic atrophy are rare allergic reactions to other rauwolfias. Hypotension from antihypertensive agents may precipitate angina attacks in susceptible individuals. Usually adverse reactions disappear when drug is withdrawn.

EUTRON™

Each tablet contains Pargyline Hydrochloride 25 mg. with Methyclothiazide 5 mg.

Indications—Moderate to severe hypertension.

Contraindications—Pheochromocytoma, paranoid schizophrenia, hyperthyroidism and advanced renal failure. Not recommended in malignant hypertension, children under 12, pregnant patients.

Do not use with: centrally or peripherally acting sympathomimetic drugs; foods high in tyramine (e.g., aged and natural cheeses); parenteral reserpine or guanethidine; imipramine, amitriptyline, desipramine, nortriptyline or their analogues; other monoamine oxidase inhibitors; methyldopa or dopamine; separate Eutron and these agents by two weeks.

Sensitivity to thiazides; severe renal disease (except nephrosis) or shutdown; severe hepatic disease; impending hepatic coma from thiazide-induced hypokalemia.

Warnings—Patients: 1. No other drugs (particularly "cold preparations" and antihistamines), cheese or alcohol without physician's consent. 2. Promptly report orthostatic symptoms, severe headache, other unusual symptoms. 3. Angina pectoris or coronary artery disease patients must not increase physical activity with improved anginal symptoms or well-being.

Physicians: 1. Use antihistamines, hypnotics, sedatives, tranquilizers and narcotics (meperidine contraindicated) cautiously in reduced doses. 2. Stop Eutron two or more weeks before elective surgery; in emergency surgery reduce premedication (narcotics, sedatives, analgesics, etc.) to 1/4 to 1/5; carefully adjust anesthetic dosage to patient response. 3. Use cautiously in advanced renal failure. 4. Pargyline may induce hypoglycemia. 5. Consider possible sensitivity reactions when a history of allergy or asthma is present. 6. If potassium is indicated, dietary supplement is recommended; enteric-coated potassium tablets may induce serious or fatal small bowel lesions (stenosis with or without ulceration), cause obstruction, hemorrhage, and perforation frequently requiring surgery; discontinue medication immediately if abdominal pain, distention, nausea, vomiting or gastrointestinal bleeding occurs; Eutron does not contain added potassium. 7. Possible systemic lupus erythematosus has been reported for thiazides.

Precautions—Pargyline: Use cautiously at reduced dosage: caffeine, alcohol, antihistamines, barbiturates, chloral hydrate, other hypnotics, sedatives, tranquilizers, narcotics. Periodically do urinalyses, blood counts, liver function tests, etc. Use with caution in liver disease. Watch for orthostatic hypotension, especially in impaired circulation (e.g., angina pectoris, coronary artery disease, cerebral arteriosclerosis); also, augmented hypotension in concomitant febrile illnesses. Reduce or discontinue if hypotension is severe. In impaired renal function watch for cumulative drug effects, elevated BUN and other evidence of progressive renal failure; withdraw drug if these persist. In surgery increased central depressant response (hypotension and increased sedative effect) can be controlled by (1) discontinuing at least two weeks prior; (2) in emergency surgery lowering dose of premedication; (3) when necessary, administering a vasopressor. Do not use in hyperactive and hyperexcitable patients. Pargyline may unmask severe psychotic symptoms where emotional problems pre-exist. Use cautiously in Parkinsonism, especially with antiparkinsonian agents. In prolonged therapy, examine for change in color perception, visual fields, fundi and visual acuity. Also, prolonged therapy has made certain patients refractory to nerve blocking effects of local anesthetics.

Methyclothiazide: Use cautiously in severe renal dysfunction, impaired hepatic function or progressive liver disease; also in pregnancy (bone marrow depression, thrombocytopenia, and altered carbohydrate metabolism have been reported in certain newborn). In surgery thiazide may reduce vasopressor response and increase tubocurarine response. Antihypertensive response may be enhanced following sympathectomy. Watch for electrolyte imbalance (e.g., hyponatremia). Give supplemental chloride if hypochloremic alkalosis occurs and supplemental potassium if hypokalemia occurs (especially in digitalized patients). Thiazides may decrease serum P.B.I. without signs of thyroid disturbance.

Adverse Reactions — Pargyline: Orthostatic hypotension and associated symptoms, mild constipation, fluid retention, edema, dry mouth, sweating, increased appetite, arthralgia, nausea, vomiting, headache, insomnia, difficult in micturition, nightmares, impotence, delayed ejaculation, rash, purpura, weight gain, hyperexcitability, increased neuromuscular activity and other extrapyramidal symptoms. Drug fever is extremely rare. Reduction in blood sugar and hypoglycemic effects are possible. Congestive heart failure has been reported in a few patients with reduced cardiac reserve.

Methyclothiazide: Blood dyscrasias (thrombocytopenia with purpura, agranulocytosis, aplastic anemia); elevation of BUN, blood sugar or serum uric acid (gout may be induced); anorexia, nausea, vomiting, diarrhea, headache, dizziness, paresthesia, weakness, skin rash, photosensitivity, jaundice and pancreatitis. Cutaneous vasculitis in elderly patients has been reported with other thiazides.

If side effects are severe or persist, reduce dosage or withdraw drug. 804438R

ABBOTT

TM-TRADEMARK



IN THE BOOKS



HEREDITY, DISEASE, & MAN: Genetics in Medicine: Alan E. H. Emery, M.D.; Published by the University of California Press, Berkeley, California, 1968; 247 Pages; Price $6.95.

For those readers who enjoy science (and genetics) in the manner it is usually presented in the *Scientific American*, this book will offer a very profitable evening. A flock of very simplified diagrams, tables and graphs illustrate this necessarily sketchy review of current ideas and methods in human genetics. Apparently directing his material primarily to the student, rather than to the clinician, the author only nudges the big problem facing the physician in practice—that of genetic counseling to parents and families.

The first three chapters discuss genes and chromosomes from the morphological and functional viewpoint. There is an excellent discussion in Chapter Four of the genetic role in embryological development, including the story of the inactivation of the X chromosome in females. Chapters Five and Six discuss the relationship of heredity and disease, and Chapter Seven outlines the relationship of drug reactions to hereditary factors (now grouped under an ever increasingly fashionable term, pharmacogenetics).

In Chapter Eight we come up against those arch villains of medical students who have to memorize the population "laws", Hardy and Weinberg. The effect of radiation on man is reviewed in Chapter Nine, and only in the final chapter does the book attempt to relate some practical—as far as the clinician is concerned—problems to our newly gained knowledge in human genetics.

This is a well-written and organized book, but not exactly what the doctor ordered.

LEONARD E. REISMAN, M.D.

SURGERY OF THE AGED AND DEBILITATED PATIENT: edited by John H. Powers, M.D.; Published by W. B. Saunders Company, Philadelphia and London, 1968; 611 Pages; Price $19.00.

This is an excellent book which presents an enlightened and intelligent approach to surgery in the aged and debilitated patient. The book points out that chronologic age is not a reliable index of ability, and that age affects all organs and systems in the same fashion, with a progressive loss of functioning cells. This book notes both biologic and pathologic aging and suggests that much of the infirmities and disability of aging are a result of pathologic processes. It further suggests that in those animals possessing an immune response, longevity may be increased.

The metabolic variables of the elderly surgical patient, as opposed to the younger patient, differ on a quantitative rather than a qualitative basis. Diminished functional capacity of vital organs in the aged patient demands more precise preoperative preparation, operative management and postoperative care. From the preoperative standpoint, adequate blood volume, extracellular fluid, and source of energy for normal metabolism are emphasized. To achieve these ends the book recommends a training period, during which blood volume is built, cardio-pulmonary deficiencies are corrected and adequate nutrition is achieved for the elderly elective surgical patient. Anesthesia in such patients is accompanied by an increased risk. This can best be minimized by moderation both in the use of premedication and in the use of anesthetic agents. In both situations, individualization is important, and probably there is less disturbance of physiologic function with conduction anesthesia as opposed to general anesthesia. However, in certain operations in different individuals, general anesthesia is more appropriate. Proper monitoring of the patient is essential during anesthesia and in the immediate postoperative period. Quite often difficulty in the postoperative period is associated with co-existing degenerative and debilitating diseases which have not been diagnosed in the preoperative period. Therefore, these patients may have been inadequately treated or mismanaged. This emphasizes the importance of meticulous preoperative investigation and preparation for whatever surgery is indicated. A sympathetic understanding of the emotional needs and psychologic problems of the aged patient will facilitate his surgical care.

One chapter of the book is devoted to infections in the debilitated surgical patient, primarily to the recognition, surgical treatment, and chemotherapy of the various types of surgical infection, with special consideration for the organisms involved. This chapter is rather well done and worthy of considerable contemplation. The last 150 pages of the book are devoted to elective surgery, urgent surgery, vascular surgery, fractures and orthopedics of the debilitated patient, cancer in the older patient, postoperative management and complications, hepatic failure in the surgical patient, rehabilitation after major surgery trauma, and surgical mortality. In these chapters several interesting points are made and elaborated upon. It is essential in some situations to modify the operation to suit the patient on the basis of his age and degree of debility and in some situations of elective surgery, all that can be done is to do no harm. Diagnosis is important so that surgery may be direct and precise. Postoperative complications should be avoided since they prolong the con-

valescent period and use up the elderly patient's reserve.

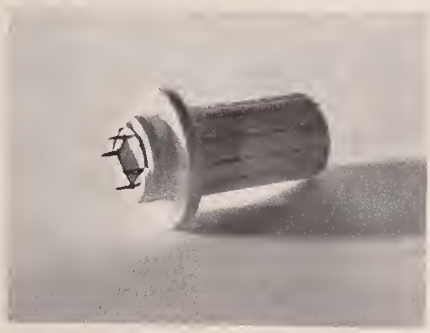
Age per se is not an indication for inferior treatment, and before a surgeon condemns a patient to gradual increasing disability, he should be certain that nothing more can be done. The cancer surgeon, in his zeal to cure the disease, whether his surgery be palliative, radical, or super-radical, must always remember the patient's quality and dignity for life after surgery. Every effort should be made to rehabilitate the patient following surgery, both on a physical as well as a psycho-social level. In discussing surgical mortality, the importance of avoiding complications is emphasized as well as the elimination of primary disease, even though asymptomatic, in order to avoid lethal complications later. Professional errors are considered and it is felt that this is an area in which reduction can be achieved.

JOHN L. COOK, M.D.

Ernest F. Oblander, M.D. is the new director of Maternal, Child and School Health for the Louisville and Jefferson County Department of Health. Doctor Oblander, an obstetrician, graduated from the University of Louisville School of Medicine in 1963 and completed his internship and residency training at Baptist Hospital, Nashville, Tenn.

To fight TB- find it first!

Make tuberculin testing routine with every physical examination.



TUBERCULIN, TINE TEST (Rosenthal)

Side effects are possible but rare: vesiculation, ulceration, or necrosis at test site. Contraindications: none, but use with caution in active tuberculosis. Available in 5's and 25's.

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After the picnic even Gramps Was a victim of intestinal cramps

Parepectolin for quick relief of acute diarrhea
...soothes colicky pain with paregoric*
...consolidates fluid stools with pectin
...adsorbs irritants with kaolin, and protects intestinal mucosa

In elderly patients it is particularly important to stop the diarrhea fast. Parepectolin helps you control diarrhea promptly and gain the patient's confidence until etiology has been determined.

Parepectolin®

Each fluid ounce of creamy white suspension contains:
*Paregoric (equivalent) . . . . . (1.0 dram) 3.7 ml.
Contains opium (¼ grain) 15 mg. per fluid ounce.
warning: may be habit forming
Pectin . . . . . (2½ grains) 162 mg.
Kaolin (specially purified) . . . . (85 grains) 5.5 Gm.
(alcohol 0.69%)
Usual Adult Dose: One or two tablespoonfuls three times daily.

ROER

WILLIAM H. RORER, INC.
Fort Washington, Pa.

From the files of the

COMMITTEE FOR THE

STUDY OF MATERNAL MORTALITY

CASE 28-66. A 38 year old married white gravida 7, para 6, was admitted to the hospital in labor at term at 6:35 p.m. on October 3, 1966. The temperature was 98.6°, pulse 80, respiration 18 and blood pressure 100/60. The fetal heart beat was counted at 160 in the right lower quadrant. The cervix was thick, 6 cm dilated with the membranes intact, and a forebag present. The patient was sedated with 50 mg Demerol and 20 mg Largon at 8:30 p.m. At 10:30 p.m. the cervix was dilated to 8 cm. She was moved to the delivery room where the membranes were ruptured artificially. She received 3 minim doses of Pitocin at 10:55 p.m. and 11:25 p.m. The cervix was then completely dilated. Her physician then discovered that the fetus lay in face presentation; he attempted to flex the head but was unable to do so. A nurse was called to administer a general anesthetic with sodium pentothal, and an internal podalic version and breech extraction was performed with delivery at 12:55 a.m. of a living male infant in good condition weighing 10 lb. 11 oz. One ampule of Pitocin was given immediately postpartum. The placenta was expressed spontaneously at 1:05 a.m. and then one ampule of Ergotrate was given. The baby received 0.2 mg of Nalline intramuscularly at 12:56 a.m. The patient was watched in the delivery room until 1:40 a.m., when her pulse was 88, the uterus was firm, and the bleeding was controlled. The infant was also in good condition.

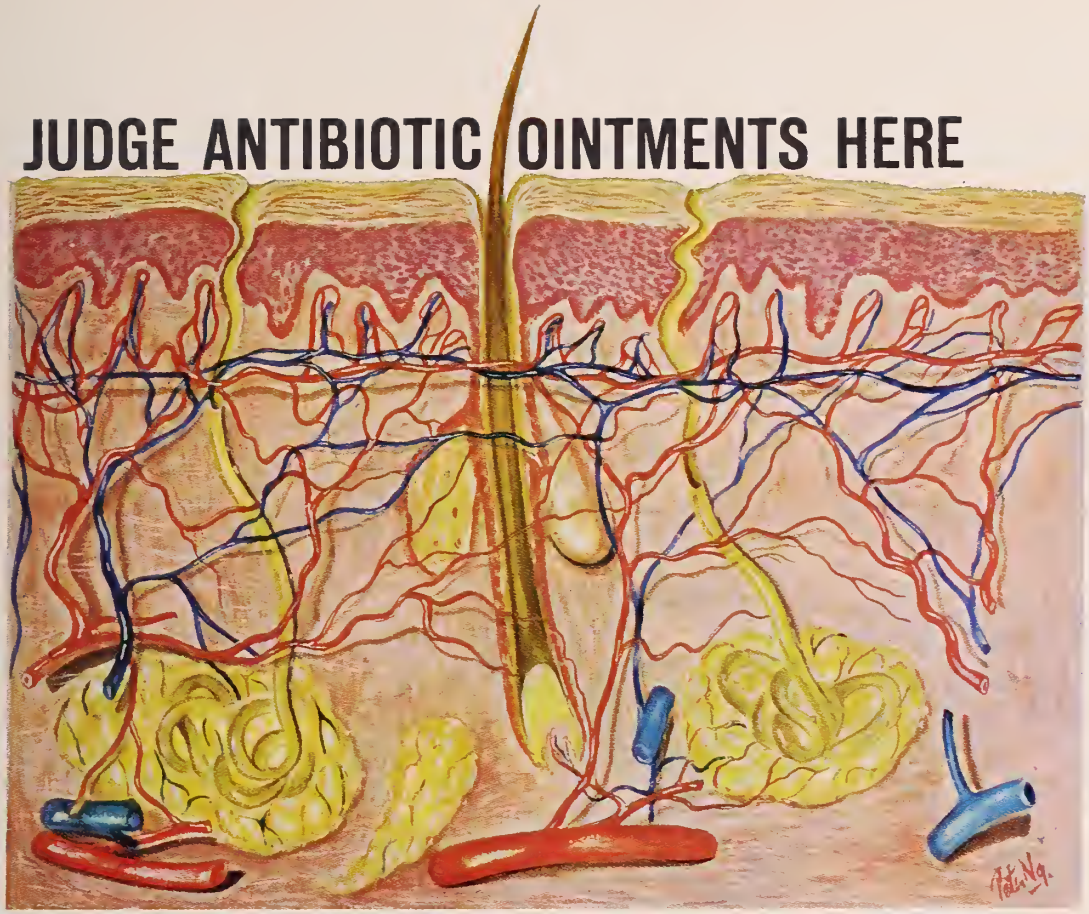
The patient was conscious before she was removed from the delivery room. In her room she talked sensibly with her husband. At 2:00 a.m., however, the patient complained to her husband that she was smothering. When the nurse arrived in a few minutes, she was found to be in deep shock. Dextran and glucose were started intravenously and her physician was called. He arrived at 2:10 a.m. and started administering oxygen by mask. He gave her 5 mg aramine intramuscularly; blood was ordered and started at 3:00 a.m. Her initial blood pressure of 70/44 began to fall. Aramine was given intravenously without improvement. At no time was there any excessive vaginal bleeding, and the fundus was described as remaining firm and high.

Repeated checks of her lung fields showed no sign of atelectasis, though the breath sounds were loud and harsh. There was no dullness to percussion in either lung base. Initially her pulse had been 100 and regular, but as the state of shock advanced the rate became faster, and an irregular rhythm with many extrasystoles developed, and ultimately the rate was completely irregular and very rapid. The patient died at 4:10 a.m. Permission for an autopsy was refused. The cause of death was listed on the certificate as "coronary embolism due to childbirth".

Comments

The committee classified this as a direct obstetrical death with preventable factors on the part of the physician. This 38 year old grande multipara received 3 minim of Pitocin on two occasions after the membranes were artificially ruptured with the cervix 8 cm dilated in the presence of an undiagnosed abnormal presentation. The choice of anesthetic agent was inappropriate for obtaining sufficient uterine relaxation to permit an internal podalic version and extraction. The committee agreed that the most likely cause of death was a rupture of the uterus with intra-abdominal bleeding. This could have resulted from the ill-advised administration of Pitocin to a patient with an undiagnosed cephalopelvic disproportion, or from the internal podalic version. Even though there was no excessive vaginal bleeding, the fundus was described as "firm and high", suggesting possible displacement by a hematoma. Certainly an autopsy was needed in this case to make the unlikely diagnosis of coronary embolism, rather than the obvious possibility of uterine rupture.

JUDGE ANTIBIOTIC OINTMENTS HERE



Results on skin are final proof of any topical antibiotic's effectiveness

No in vitro test can duplicate a clinical situation on living skin. 'Neosporin' (polymyxin B—bacitracin—neomycin) Ointment has consistently proven its effectiveness in thousands of cases of bacterial skin infection. The spectra of the three antibiotics overlap in such a way as to provide bactericidal action against most pathogenic bacteria likely to be found topically. Diffusion of the antibiotics from the special petrolatum base is rapid since they are insoluble in the petrolatum, but readily soluble in tissue fluids. The Ointment is bland and nonirritating.

Caution: As with other antibiotic preparations, prolonged use may result in overgrowth of nonsusceptible organisms and/or fungi. Appropriate measures should be taken if this occurs. Articles in the current medical literature indicate an increase in the prevalence of persons allergic to neomycin. The possibility of such a reaction should be borne in mind.

Contraindications: This product is contraindicated in those individuals who have shown hypersensitivity to any of its components.

Supplied: Tubes of 1 oz., ½ oz. with applicator tip, and ⅛ oz. with ophthalmic tip.

Complete literature available on request from Professional Services Dept. PML.

'NEOSPORIN'®
brand

POLYMYXIN B-BACITRACIN-NEOMYCIN OINTMENT

BURROUGHS WELLCOME & CO. (U.S.A.) INC., Tuckahoe, N.Y.

New

Therapeutic breakthrough in non-narcotic control of the pain of trigeminal neuralgia

Tegretol®
carbamazepine

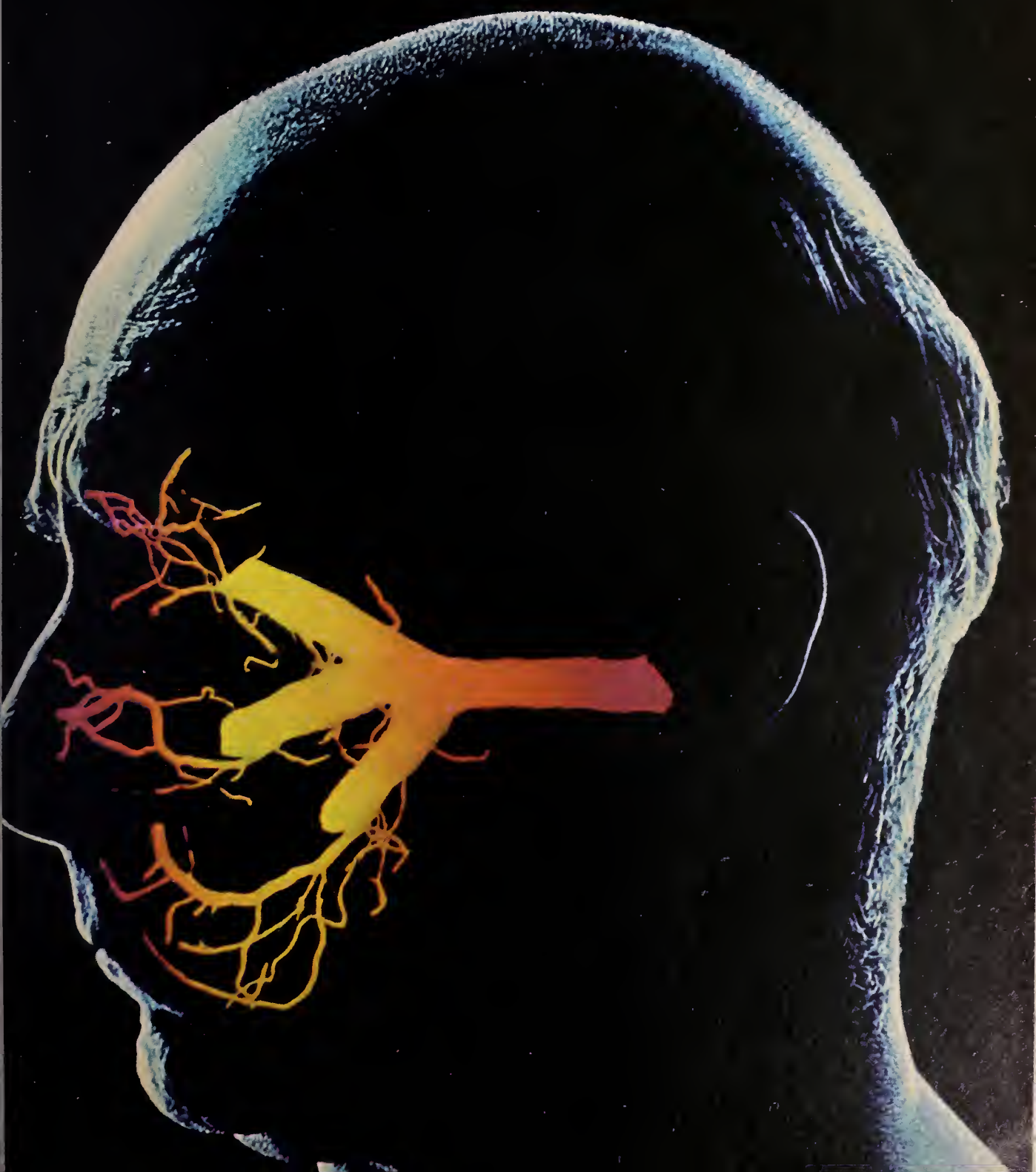
Warning
Fatal cases of aplastic anemia have been reported following treatment with Tegretol. Agranulocytosis, thrombocytopenia and transitory leukopenia have also been observed.
Complete blood and platelet counts should be done prior to and at regular intervals during treatment with the drug (see recommendations under "Important Note and Precautions") to help in the early detection of serious bone marrow injury. Abnormalities in initial blood tests should rule out use of the drug. Also, patients should be made aware of such early toxic signs of a potential hematologic problem as fever, sore throat, mouth ulcers, easy bruising and petechial or purpuric hemorrhage. Should such signs appear, the patient should be advised to discontinue the drug and to report to the physician immediately.

Indication Tegretol is indicated in the treatment of the pain associated with true trigeminal neuralgia. It is not a simple analgesic and should never be administered for relief of trivial facial aches or pains.
Contraindication Do not use in those with a known sensitivity to any tricyclic compound or in those being treated with M.A.O.I. agents. As long a period as possible should elapse before using Tegretol in patients who have been treated with M.A.O.I.'s, with a minimum of 7 days. In such cases, initial dosage should be low and the patient's reaction to gradual increments closely observed.
Important Note and Precautions Familiarity with the clinical symptoms which lead to an accurate diagnosis of true trigeminal neuralgia and with the complete prescribing information, careful patient selection, a thorough examination before treatment and close patient supervision throughout the treatment period are essential to the safe and effective use of this drug.
Where feasible, Tegretol should not be used in conjunction with any potent drug which may increase the possibility of toxic reactions.
In pregnancy, the drug should not be prescribed during the first trimester and thereafter only to patients in whom the clinical situation warrants the potential risk. It should not be administered to nursing mothers.
Patients with increased intraocular pressure should be closely observed during treatment with this drug because of its anticholinergic effect.
Because of the drug's relationship to other tricyclic compounds, the possibility of activation of latent psychosis and, in the elderly, of confusion or agitation, should be considered.
Dizziness and drowsiness may occur and patients should be cautioned about the hazards of operating machinery or automobiles and of engaging in other hazardous tasks.
Use cautiously in patients with a history of coronary artery disease, organic heart disease, congestive failure or liver disease.
Before initiating therapy, the following laboratory procedures should be performed:
1. Complete blood and platelet counts which, if abnormal, should rule out the use of the drug.
2. Baseline evaluations of liver function.
During treatment with Tegretol, the following laboratory procedures should be performed:
1. Complete blood and platelet counts should be done at intervals of one week during the first month of drug treatment, every two weeks during the second and third months, and at monthly intervals thereafter for as long as the patient is taking the drug. A trend toward a decreasing white blood cell count should suggest a dosage reduction and more frequent laboratory and clinical evaluations. Should this trend continue, the d should be discontinued.
2. Liver function tests must be performed at regular intervals during ment with this drug since liver damage may occur during therapy. Th drug should be discontinued immediately in cases of aggravated live dysfunction or active liver disease.
3. Periodic eye examinations, including slit-lamp, funduscopy and ton etry, are recommended for patients being treated with this drug sinc many phenothiazines and related drugs have been shown to cause e changes.
4. Complete urinalysis and BUN should be done on patients treated Tegretol because of observed renal dysfunction.
Adverse Reactions Dizziness, drowsiness, unsteadiness on the feet, nausea, vomiting, aplastic anemia, transitory leukopenia, agranulocyt eosinophilia, leukocytosis, thrombocytopenia, purpura, abnormalities liver function tests, cholestatic and hepatocellular jaundice, urinary fr quency, acute urinary retention, oliguria with elevated blood pressure albuminuria, glycosuria, elevated BUN, microscopic deposits in the u impotence, disturbances of coordination, confusion, headache, fatigu blurred vision, transient diplopia and oculomotor disturbances, speec disturbances, abnormal involuntary movements, peripheral neuritis ar paresthesias, depression with agitation, talkativeness, nystagmus, tin- nitus, paralysis and other symptoms of cerebral arterial insufficiency, pruritic and erythematous rashes, urticaria, Stevens-Johnson syndron photosensitivity reactions, alterations in skin pigmentation, exfoliative dermatitis, alopecia, diaphoresis, recurrence of thrombophlebitis, ery multiforme and nodosum, aggravation of disseminated lupus erythem tosus, gastric distress, abdominal pain, diarrhea, constipation, anore dryness of the mouth and pharynx, glossitis, stomatitis, fever, chills, adenopathy, lymphadenopathy, aching joints and muscles, leg cramp conjunctivitis, left ventricular failure, aggravation of hypertension, hyp tension, syncope and collapse, edema, aggravation of coronary artery disease and congestive heart failure. (Whether these cardiovascular e are drug-related is not known. However, some of these complications resulted in fatalities.) The necessity for discontinuing the drug should dictated by the gravity and severity of the adverse reactions.
Dosage and Administration The drug should always be taken with me if possible.
Initial: One-half tablet (100 mg.) b.i.d. on the first day. Thereafter, the should be increased in one-half tablet (100 mg.) increments every 12 h until freedom from pain is achieved. To relieve pain, between 200 mg. 1200 mg. per 24 hours may be necessary.
Maintenance: Initial control of pain can be maintained in most patient with a dose of 400 mg. to 800 mg. daily. Maintenance doses may rang between 200 mg. and 1200 mg. daily.
At least once every 3 months during treatment period attempts should made to discontinue the drug or to reduce the dose to the minimum effective level.
Availability Round, white, single-scored tablets of 200 mg. in bottles of 100 and 1000. (B)46-820-
For complete details, please see Prescribing Information.

Geigy Pharmaceuticals
Division of Geigy Chemical Corporation
Ardsley, New York 10502

Geig

uncommon relief of uncommon pain



Grounds...for Regroton

chlorthalidone 50 mg.
reserpine 0.25 mg.



when you want to provide the combined benefits of two accepted agents in the treatment of mild to moderate hypertension. (Contraindications: history of mental depression, hypersensitivity, and most cases of severe renal or hepatic diseases.)

when you want to prescribe therapy that is generally well tolerated.

(However, adverse reactions may occur. For a complete listing, please refer to the full prescribing information which is summarized below.)

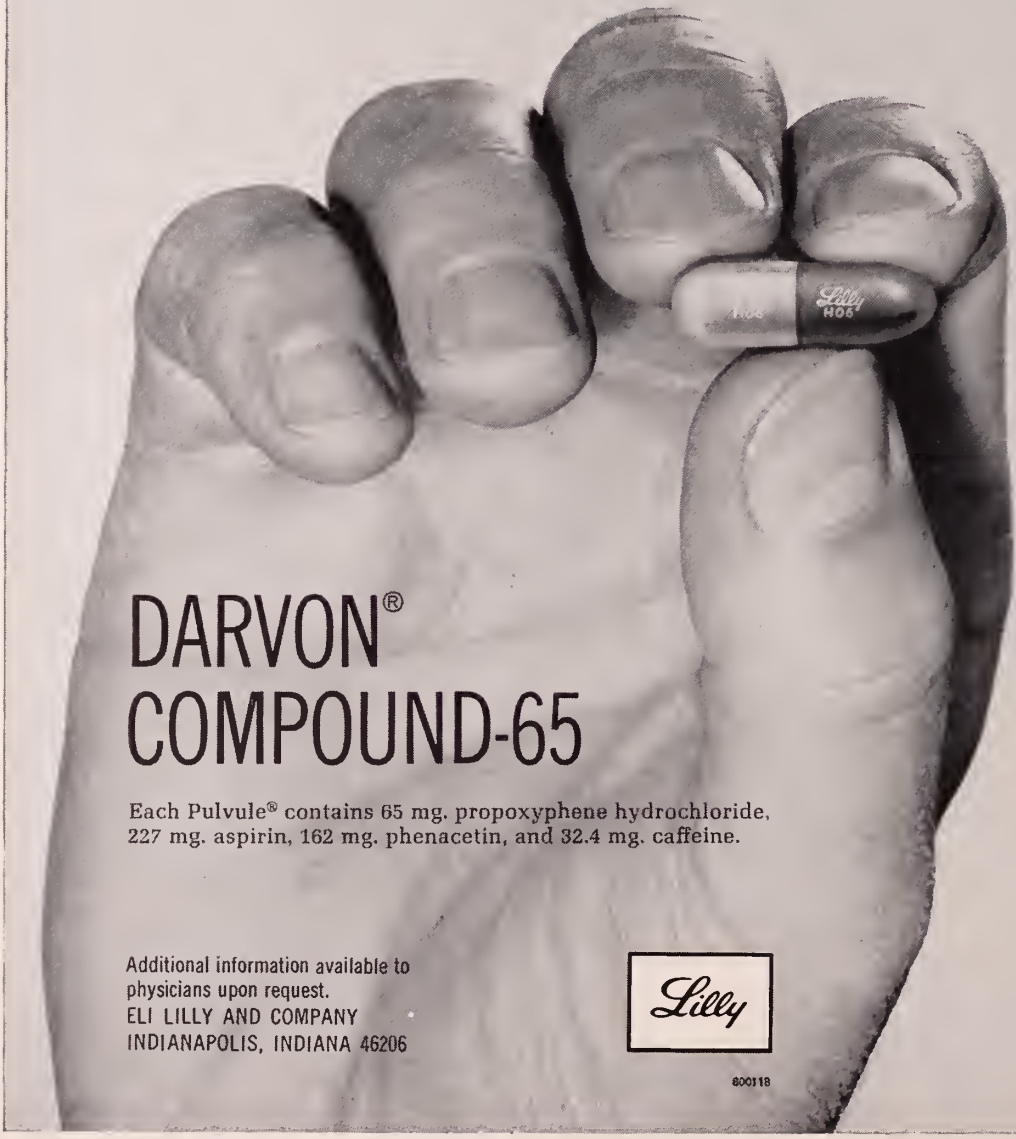
when your patient wants an easy-to-remember and reasonably priced regimen. (One tablet a day usually costs about a dime.)

ndications: Hypertension. **Contraindications:** History of mental epression, hypersensitivity, and most cases of severe renal or epatic diseases. **Warning:** With the administration of enteric-oated potassium supplements, which should be used only when dequate dietary supplementation is not practical, the possibility f small-bowel lesions (obstruction, hemorrhage, and perforation) hould be kept in mind. Surgery for these lesions has frequently een required and deaths have occurred. Discontinue coated otassium-containing formulations immediately if abdominal pain, istention, nausea, vomiting, or gastrointestinal bleeding occur. iscontinue 1 week before electroshock therapy, and if depression r peptic ulcer occurs. **Use in pregnancy:** Regroton should be used n pregnant patients or in women of childbearing potential only hen, in the judgment of a physician, its use is deemed essential to he welfare of the patients; adverse reactions (thrombocytopenia, yperbilirubinemia, altered carbohydrate metabolism, etc.) are po-ential problems in the newborn. **Precautions:** Antihypertensive herapy with Regroton should always be initiated cautiously in post-ympathectomy patients and in patients receiving ganglionic block-ng agents, other potent antihypertensive drugs, or curare. Reduce osage of concomitant antihypertensive agents by at least one-alf. To avoid hypotension during surgery, discontinue Regroton herapy two weeks prior to elective surgical procedures. In emer-ency surgery, use, if needed, anticholinergic or adrenergic drugs r other supportive measures as indicated. Because of the possibil-y of progression of renal damage, periodic kidney function tests re indicated. Discontinue if the BUN rises or liver dysfunction is ggravated. Hepatic coma may be precipitated. Electrolyte nbalance, sodium and/or potassium depletion may occur. If po-assium depletion should occur during therapy, Regroton should e discontinued and potassium supplements given, provided the atient does not have marked oliguria. Take particular care in cir-hosis or severe ischemic heart disease and in patients receiving corticosteroids, ACTH, or digitalis. Salt restriction is not recommended. Use cautiously in patients with ulcerative colitis or gallstones (biliary colic may be precipitated). Bronchial asthma may occur in susceptible patients. **Adverse Reactions:** The drug is generally well tolerated. The most frequent side effects are nausea, gastric irritation, vomiting, diarrhea, constipation, muscle cramps, headache, dizziness and acute gout. Other potential side effects include angina pectoris, anxiety, depression, bradycardia and ectopic cardiac rhythms (especially when used with digitalis), drowsiness, dull sensorium, hyperglycemia and glycosuria, hyperuricemia, lassitude, restlessness, transient myopia, impotence or dysuria, orthostatic hypotension which may be potentiated when chlorthalidone is combined with alcohol, barbiturates or narcotics, leukopenia, aplastic anemia, skin rashes, thrombocytopenia, agranulocytosis, nasal stuffiness, increased gastric secretions, nightmare, purpura, urticaria, ecchymosis, weakness, uveitis, optic atrophy and glaucoma, and pruritus. Eruptions and/or flushing of the skin, a reversible paralysis agitans-like syndrome, blurred vision, conjunctival injection, increased susceptibility to colds, dyspnea, weight gain, decreased libido, dryness of the mouth, deafness, anorexia, and pancreatitis when epigastric pain or unexplained G.I. symptoms develop after prolonged administration. Jaundice, xanthopsia, paresthesia, photosensitization and necrotizing angiitis are possible. **Average Dosage:** One tablet daily with breakfast. **Availability:** Pink, single-scored tablets in bottles of 100 and 1000. **For details, see complete Prescribing Information.** (B)46-600-B

Geigy Pharmaceuticals
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Kidney Transplantation: Patient Selection and Long-Term Care†

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General guidelines for recognizing which patient qualifies for a renal transplant are presented. Complications and problems in long-term care are pointed out with suggestions for weekly evaluation of the transplant patient who has returned to the community.

NOW that most of the technical aspects and some of the immunological aspects of human kidney transplantation have been mastered, it has become incumbent upon physicians in many specialties to be aware of some of the basic considerations of patient selection and long-term, follow-up care. This statement is supported by the fact that 1,187 human kidney transplants had been performed in the United States as of January 1, 1967[1]. While the initial patient management is performed at the transplant center, long-term, follow-up care must often, of necessity, be performed by physicians in the community. It is the intent of this paper to discuss four aspects of kidney transplantation: (1) the magnitude and scope of the problem; (2) criteria of donor and recipient selection; (3) immunosuppressive therapy; and (4) long-term care, including the more frequently encountered complications.

The Magnitude of the Problem

The need for renal homotransplantation is quite real when one considers that in the United States approximately 7,500 patients (five to 60 years of age) will die from chronic renal disease per year[2]. These patients are in the productive years of their lives; therefore, every attempt usually should be made to prolong their lives with either chronic hemodialysis or kidney transplantation.

Although the use of chronic hemodialysis to maintain patients with irreversible end-stage renal disease has considerable merit, this type of management involves numerous limitations. One of the most overwhelming problems is the increased demand for medical personnel. With present techniques a physician can manage only a small number of patients at any given time. As mentioned above, approximately 7,500 patients are potential candidates for dialysis each year, but during the year 1964-65 we managed to graduate only 7,409 physicians from U.S. medical schools[3]. In addition, the yearly cost of hemodialysis is quite high, conservatively estimated at $8,000 to $13,000 per patient. The hypertension associated with chronic renal disease continues to be a major problem. Although hemodialysis, fluid restriction, and anti-hypertensive drugs effectively control this in many patients, hypertension is relieved in some of these patients only by bilateral nephrectomy[4]. Progressive

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peripheral neuropathy and disorders of calcium metabolism are frequent and troublesome problems. Patients on chronic hemodialysis remain chronically anemic and are subjected to all of the risks of transfusions. Problems with the arteriovenous shunts have included infections, bleeding, and even exsanguination[5] and false aneurysm[6]. The average survival time of the arteriovenous shunts is four to five months[7]. There are, of course, marked geographical limitations.

Patient Selection

Patients are selected for kidney transplantation on the basis of several criteria. The primary and foremost consideration is that these patients must require either chronic hemodialysis or transplantation for the maintenance of life. There must be no uncontrolled malignancy or limiting cardiovascular or metabolic disease[4]. In addition, since these patients must undergo lifetime drug therapy and follow-up, they must be not only reliable but of average intelligence and motivation. Finally, with the recent development of various techniques of tissue typing[8], it is desirable to match donors and recipients as closely as circumstances permit.

The best results have been obtained with living related donors. Obviously, this poses both moral and ethical problems since complications occasionally occur with these donors. They are between 21 and 55 years of age and must have the same major blood group as the recipient. A prospective donor receives thorough medical evaluation. Any findings indicating that he is not a perfect operative risk with perfect renal function precludes him from donating a kidney. The living related donor is ideal from many standpoints, not the least of which is the chance to attempt to match donor and recipient more closely by the available histocompatibility tests. Of the tests available, the selection of donor-recipient on the basis of leukocyte typing or mixed leukocyte cultures seems most logical. Unfortunately, the human is such a mongrel that these techniques need further refinement and ease of performance to be of practical value. Other tests such as third party skin grafting and lymphocyte transfer tests have such problems that they remain on an experimental basis.

Cadaver donors have been used more frequently than any single category of living donors[1]. Although results with this type of donor are improving, they do not equal those obtained when living related donors are used. At the University of Kentucky Medical Center the type of cadaver donor most commonly used is the young healthy patient who has suffered a lethal head injury; this type of injury allows the necessary rapid screening to prepare for the transplant. The donor and proposed recipient must be compatible with respect to major blood group, and a blood urea nitrogen and urinalysis are performed to ascertain renal function. The donor's past history is screened for renal disease, hypertension, chronic uncontrolled infection, malignancy, and uncontrolled metabolic disease, e.g., juvenile diabetes. If all of these factors are favorable, permission to remove the kidneys for transplantation immediately after death is obtained from the responsible family member.

Immunosuppressive Therapy

The most widely accepted regimen of immunosuppressive therapy currently being used consists of azathioprine, prednisone, and local graft radiation[9]. At times of threatened graft rejection the prednisone dosage is increased—often to doses of 200 mg. per day. Since azathioprine is largely excreted by the kidney and since azathioprine overdosage results in leukopenia, the dosage of azathioprine is not usually increased at the time of threatened rejection. Actinomycin C is administered for one or multiple doses, depending upon the severity of the rejection episode. Rejection episodes that are particularly severe or are difficult to reverse are also treated with additional doses of local graft radiation.

Other forms of therapy that have been used by some centers, but which have not been generally accepted, include anti-lymphocyte serum[10], thoracic duct fistula[11], and extracorporeal radiation of circulating blood[9].

Long-Term Care

To appreciate the problems involved in long-term care of the transplant patient, one must consider the complications which may occur during the immediate postoperative period, since many of these problems recur or remain throughout the period of long-term care.

In addition, realistic awareness of possible complications in living donors must be maintained so that families can be approached in

a frank manner regarding donating a kidney. The renal transplant registry[1] has collected data on 650 live donors. Although there was no mortality in these donors, complications did occur: would infection in 1.5 percent, urinary tract infection in 1.7 percent, and prolonged hospitalization over three weeks in 1.2 percent. Hence, it is important to realize that nine percent of the 650 donors suffered some complication.

Since the recipient does not enjoy the same state of health as the live donor and is submitted to various immunosuppressive regimens, it is understandable that the complication rate in the recipient will be greater. Complications following renal transplantation can be considered in the following categories: graft rejection, infection secondary to immunosuppressive therapy, pulmonary emboli, glomerulonephritis in the transplanted kidney, bleeding problems, hypersplenism, urologic complications, and hyperparathyroidism.

The data from the Kidney Transplant Registry[1] indicates that 80 percent of recipients undergo at least one rejection episode, and rejection is the cause of death in six percent of patients. This obviously indicates that most rejection episodes can be successfully treated by intensified immunosuppressive therapy. It is generally conceded that early diagnosis and prompt intensification of immunosuppressive therapy are important to achieve reversal of graft rejection.

Rejection episodes vary in intensity and in symptomatology from an acutely explosive process with fever, malaise, anorexia, decreased urinary output, and tenderness and swelling over the transplant to a bland, subtle process which is only detectable by a high index of suspicion and repeated laboratory determinations[12]. Because rejection is often detected only by laboratory tests, frequent follow-up examinations and laboratory determinations are necessary. A brief review of various sophisticated laboratory methods has recently been outlined by Hume[9]. In the routine follow-up by the physician in the community, the following determinations, in addition to the history and physical examination, are necessary to evaluate kidney graft function: weight, blood pressure, urinalysis, blood urea nitrogen, and white blood count. A sudden increase in weight not related to steriod dosage or salt and water intake should make one suspicious of decreased graft function and requires further diagnositc studies at the transplant center. Similarly, development of hypertension in a previously normotensive individual or increase in hypertension in a hypertensive patient requires investigation at the transplant center. In some patients undergoing indolent, chronic homograft rejection, hypertension may be the only detectable manifestation.

Urinalysis is a simple but important method of following kidney transplant patients. The development of proteinuria is indicative of rejection until proven otherwise, and patients undergoing chronic graft rejection almost invariably have proteinuria[13]. Therefore, the development of, or an increase in the amount of, proteinuria requires further investigation at the transplant center. Similarly, study of the urine sediment is often helpful in detecting graft rejection. Lymphocytes in the urine may be the first or only sign of rejection[12]. In the patient who suddenly develops fever, graft tenderness, and leukocytosis, examination of the stained urine sediment may be the only way to differentiate acute pyelonephritis from acute rejection. In the former, large numbers of polymorpho-nuclear leukocytes will be seen, while in the latter, the predominant cells will be lymphocytes and tubular cells. Staining of the urine sediment is quite simple[12] and can easily be performed in the physician's office. After centrifugation the sediment is air dried on slides, fixed with alcohol, and stained with Wright's or Giemsa stain. Because the cells in urine frequently stain too deeply with standard techniques for blood smears, the time of application of both stain and buffer is decreased to 50-75 percent of that used with blood. It is important to examine freshly voided urine as bacteruria, especially gram positive organisms, often results in such significant distortion of cells that identification is impossible.

One of the most useful indices for detection of graft rejection is a rise in the blood urea nitrogen[9]. This may occur without an accompanying rise in serum creatinine, and if promptly treated, the other signs of rejection may not appear[9]. Acute rejections are always accompanied with a rise in BUN, and chronic rejection, if followed long enough, will always demonstrate a BUN rise.

Neither the white blood count nor the differential count is of particular value in detecting

rejection episodes per se. However, since one of the more frequent complications of immunosuppressive therapy is leukopenia[1], it is important to continually monitor the white blood count. Manipulation of immunosuppressive therapy is dictated both by graft function and the white blood count. It is important to be aware that azathioprine is largely excreted by the kidney, and at times of graft rejection with deterioration of renal function the amount of excreted azathioprine decreases; therefore, even though the patient may be maintained on a constant dose level, the blood level of azathioprine rises. For this reason, at times of severe graft rejection we do not raise the dose of azathioprine and often may decrease it.

The most frequent cause of morbidity and mortality reported in the transplant registry[1] has been infection. Twenty-one percent of 949 transplanted patients died of infection, and an additional 45 percent had a reportable, nonfatal infection. Therefore, 66 percent of all transplanted patients had some clinical form of infection after transplantation. This is due to the fact that immunosuppressive drugs currently used in clinical transplantation can cause leukopenia, profound lymphoid depletion, and inhibition of antibody responses to a wide variety of antigenic stimuli. Infections result not only from common pathogenic bacteria, but infections from viruses,[9, 14] bacteria that are usually non-pathogenic[6], and fungi not only occur but are occasionally fatal. Therefore, prophylactic antibiotics are contraindicated because the incidence of emergence of secondary infections by antibiotic resistant bacteria or by fungi will be quite high. Antibiotic therapy should be directed by culture and sensitivity data whenever possible, and in general we try to avoid prolonged therapy with broad spectrum antibiotics. Since immunosuppressive drugs may depress the bone marrow, particularly the leukocytes, we tend to avoid antibiotics which have the capability of causing marrow depression unless sensitivity data indicates them to be the agent of choice. Lastly, it is important to be aware that certain antibiotics are nephrotoxic[15] or can cause increasing azotemia[15] or significant ototoxicity[16] in individuals with impaired renal function.

The spectrum of sites of infection in the immunosuppressed patient is as diverse as the spectrum of infecting organisms. The Kidney Transplant Registery[1] lists the following data regarding the sites of non-fatal infections: incision, 17 percent; pulmonary, 16 percent; genitourinary tract, 43 percent; blood, 16 percent; peritoneum, seven percent; and central nervous system, one percent. Because the mortality from infection in these immunosuppressed patients is high and because of the wide diversity of offending organisms, we feel that most post-transplant infectious problems should be managed at the transplant center.

The incidence of pulmonary emboli in transplanted patients[9] appears to be higher than that observed with other surgery of comparable magnitude. This probably is due to the fact that the transplanted kidney is located in the iliac fossa in close proximity to the pelvic veins. A significant amount of inflammatory reaction exists around rejecting kidneys, and this may predispose to the development of pelvic vein thrombosis. For this reason we now ligate all of the branches (including the hypogastric) of the iliac veins at the time of transplantation. Hume[9] reported a fourfold increase in the incidence of pulmonary embolism in splenectomized patients. Since there was no demonstrable improvement in survival of splenectomized patients[9], routine splenectomy was abandoned. Similarly, we do not perform routine splenectomy at the University of Kentucky but have employed it in two patients who developed hypersplenism post-transplantation. Najarian[17] has demonstrated that fat embolism may occur in patients on massive doses of steroids.

Approximately one to two percent of kidney transplant recipients have been reported to develop the original kidney disease in the transplant[1]. As more becomes known about the pathology and clinical manifestations[13] of chronic graft rejection, it may become apparent that some of the patients who are diagnosed as having chronic glomerulonephritis in the graft are indeed patients with chronic graft rejection.

The majority of bleeding problems are related to surgical complications, thrombocytopenia secondary to either sepsis or drug-induced marrow aplasia, or steriod-induced peptic ulcers[18]. Post-transplantation bleeding problems may be particularly difficult to manage; and generally, when they arise, patients should be returned to the transplant center.

The occurrence of hypersplenism[19] in post-transplant patients is greater than that seen in a non-transplant population. A high index of suspicion should arise when the transplant patient's white blood and/or platelet counts seem particularly sensitive to azathioprine dosage. The diagnosis can be established by Cr^{51} tagged red blood cell survival studies combined with splenic scans.

A comprehensive review of urologic complications following renal homotransplantation has been presented by Prout et al.[20] Seventy-five percent of their patients had a significant urinary tract infection at some time in their post-transplant course. However, when last evaluated, 67 percent had an insignificant number of organisms present in their urine cultures. This would indicate that, although the frequency of urinary tract infections is high, the number of patients that can be treated successfully is also high. Since quantitative bacterial culture data and antibiotic sensitivities are necessary to adequately manage urinary tract infections, it often is necessary to return the patient to the transplant center for evaluation and therapy.

Most other urological complications, such as ureterovesical leaks, vesicocutaneous fistulae, perivesical abscess, and ureteral obstruction are infrequent and usually occur in the immediate post-transplant period[20]. While isolated ureteral rejection may possibly occur, evidence has been presented that it is quite rare[21].

Secondary hyperparathyroidism occurs commonly in chronically uremic patients, and it appears that an autonomous state of parathyroid hyperfunction may persist in some patients after renal homotransplantation has corrected the uremic state[22]. For this reason calcium and phosphorus levels are monitored at the transplant center during the post-transplant period. When there is evidence of persistent, autonomous hyperparathyroidism, these patients should be treated as any other patient with primary hyperparathyroidism.

The above represents the more commonly encountered post-transplant complications. Since management of immunosuppressive drug therapy is often more difficult at the time of treatment of these complications, they usually are best managed at the transplant center. Prompt recognition and vigorous treatment often make the difference between success and failure. Fortunately, the incidence of complications decreases progressively with time, and many of the long-term survivors require only periodic examinations in order to adequately assure their health status.

Having discussed the high incidence of complications along with the problems in long-term care, it would be self-defeating not to mention the accomplishments. The renal homograft registry figures[1] show that the two-year transplant survival figures among monozygotic twins is 77 percent; recipients with sibling grafts, 53 percent; parents, 43 percent; living unrelated, 15 percent; and cadaver grafts, 14 percent.

At the University of Kentucky Medical Center the philosophy "lose the graft but save the patient" has resulted in less aggressive immunosuppressive therapy, fewer complications, and an 88 percent patient survival. To achieve this, six patients have received two separate transplants, and two others have received three kidneys.

References

1. Murray, J. E., Barnes, A. B., and Atkinson, J.: Fifth Report of the Human Kidney Transplant Registry. *Transplantation* 5:752, 1967.
2. Couch, N. P.: Supply and Demand in Kidney and Liver Transplantation: A Statistical Survey. *Transplantation* 4:587, 1966.
3. *American Medical Association Directory of Approved Internships and Residencies,* 1966.
4. Hume, D. M., Magee, J. H., Kauffman, H. M., Rittenbury, M. S., and Prout, G. R.: Renal Homotransplantation in Man in Modified Recipients. *Ann. Surg.* 158:608, 1963.
5. Gonzalez, F. M., Pabico, R. C., Brown, H. W., Maher, J. F., and Schreiner, G. E.: Further Experience with the Use of Routine Intermittent Hemodialysis in Chronic Renal Failure. *Am. Soc. Artificial Internal Organs* 9:11, 1963.
6. Kauffman, H. M.: Unpublished data.
7. Waterhouse, K., Friedman, E. A., McDonald, H. P., and Thompson, G. E.: Intermittent Hemodialysis for Chronic Renal Failure. *J. Urol.* 97:426, 1967.
8. Russell, P. S. and Winn, H. J.: Histocompatibility Testing. *National Academy of Sciences,* Washington, 1965.
9. Hume, D. M., Lee, H. M., Williams, G. M., White, H. J. O., Ferre, J., Wolf, J. S., Prout, G. R., Slapak, M., O'Brien, J., Kilpatrick, S. J., Kauffman, H. M., and Cleveland, R. J.: Comparative Results of Cadaver and Related Donor Renal Homografts in Man, and Immunologic Implications of the Outcome of Second and Paired Transplants. *Ann. Surg.* 164:352, 1966.
10. Starzl, T. E., Marchioro, T. L., Hutchison, D. E., Porter, K. A., Cerilli, G. J., and Brettschneider, L.: The Clinical Use of Antilymphocyte Globulin in Renal Homotransplantation. *Transplantation* 5:1100, 1967.
11. Tilney, N. L. and Murray, J. E.: The Thoracic Duct Fistula as an Adjunct to Immunosuppression in Human Renal Transplantation. *Transplantation* 5:1204, 1967.
12. Kauffman, H. M., Clark, R. F., Magee, J. H., Rittenbury, M. S., Goldsmith, C. M., Prout, G. R., and Hume, D. M.: Lymphocytes in Urine as an Aid in the Early Detection of Renal Homograft Rejection. *Surg., Gyn., & Obst.* 119:25, 1964.
13. Harlan, W. R., Holden, K. R., Williams, G. M., and Hume, D. M.: Proteinuria and Nephrotic Syndrome in Rejection of Kidney Transplants. *New Eng. J. Med.* 277:769, 1967.
14. Rifkino, D., Marchioro, T. L., Waddell, W. R., and Starzl, T. E.: Infectious Diseases Associated with Renal Homotransplantation. *JAMA* 189:397, 1964.
15. Kunin, C. M.: Nephrotoxicity of Antibiotics. *JAMA* 202:132, 1967.
16. Kunin, C. M.: A Guide to Use of Antibiotics in Patients with Renal Disease. *Ann. Int. Med.* 67:151, 1967.
17. Jones, J. P., Engelman, E. P., and Najarian, J. S.: Systemic Fat Embolism After Renal Homotransplantation and Treatment with Corticosteriods. *New Eng. J. Med.* 273:1453, 1965.

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Bladder Sign: A New Sign To Aid in the Radiological Diagnosis of Pelvic Masses

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This new radiological sign consists of a mass blending with the ilia bilaterally and causing obliteration of the normally clear zone adjacent anteriorly and laterally to the pelvic inlet. The mass forms a clear oval margin and characteristic angle posteriorly by displacing the colon. Ovarian and uterine masses cannot produce this radiological finding.

THE correct diagnosis of a pelvic mass is a difficult problem. The presence of an abnormal density on the radiograph must first be determined by the observer, and then many radiological facts and aids must be employed. Considerations should be given to the size, shape, location, density, and presence or absence of calcifications. Surrounding structures must be analyzed to see if they have been altered by the mass. Appearance of x-ray densities produced by air, soft tissue, bone, water, and metals must be constantly kept in mind. Contrast materials or air may be injected to develop distinction between the surrounding structures. The size in relation to the organs or structures in the area should always be given importance. Shape is of value in that most benign lesions will tend to be regular and have distinct margins. The location will help in identification of the organ or structure involved.

A completely full urinary bladder contains approximately 600 cc. and has an oval form. The long diameter of the oval measures about 12 centimeters and is directed superiorly and inferiorly. It has a postero-superior, antero-inferior, fundal, apical and two lateral surfaces. The postero-superior surface, directed upward and backward, is covered by peritoneum. It is separated from the rectum by the rectovescial excavation, and anteriorly it is in contact with loops of the small intestine. The antero-inferior surface is not covered by peritoneum and lies against the pubic bones. Superiorly it is in contact with the posterior aspect of the anterior wall of the abdomen. Laterally the bladder is devoid of peritoneal investment and is in contact with the lateral walls of the pelvis. In a distended bladder the fundus is separated from the rectum merely by the rectovesical fascia. Its apex is displaced upward and forward superior to the point of the attachment of the middle umbilical ligament.

An empty bladder assumes the form of a flattened tetrahedron, with the vertex tilted forward. It has four surfaces: fundus, vertex, and superior and inferior surfaces. The vertex is also directed forward toward the upper part of the symphysis pubis. This causes the fundus to become triangular and directed downward and backward to the rectum. The superior surface is triangular and is bounded on either side by a lateral border which separates it from the inferior surface and behind by a posterior border. The border is represented by a line joining the two ureters.

Discussion

Based on anatomical considerations of a normal and distended bladder, in a random study of over 200 patients, a new sign is described to distinguish the bladder from uterine, ovarian and other pelvic masses. The principles of the bladder sign are: 1. A distended bladder always obliterates the normally clear zone adjacent anteriorly and laterally to the pelvic inlet. 2. A uniform density rises superiorly from the pelvis and blends with the ilia bilaterally, forming a clear oval margin and characteristic angle above the acetabulum. The mass displaces the rectosigmoid and cecum laterally. (Figures 1 and 2)

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FIGURE 1. Distended bladder with lower arrow pointing to obliteration of the normal clear zone adjacent to the pelvic inlet. Upper arrow demonstrates the angle formed by displacement of the recto-sigmoid colon laterally.



FIGURE 2. Markedly distended bladder with arrows showing obliteration of the clear zone in the pelvis and displacement of the recto-sigmoid colon laterally. The sign is true of either mild or markedly distended urinary bladders.

The obliteration of the clear zone is due to the fact that the distended bladder is largely an anterior retroperitoneal structure at the pelvic inlet which displaces the bowel by pushing into the abdominal cavity. The characteristic angle is then formed by the retroperitoneal attachment of the bladder as it pushes into the abdominal cavity from below.

Uterine and ovarian masses lie in the mid pelvis and not in the anterior pelvis. Enlargement of either cannot obliterate the anterior clear zone since neither has anterior attachments. In general, they do not enlarge symmetrically. Also, the ovaries are lateral in position and tend to enlarge superiorly into the abdomen out of the pelvis area. (Figure 3)



FIGURE 3. Large ovarian cyst with the arrow showing that no obliteration of the normal clear zone has occurred, nor the recto-sigmoid colon displaced laterally.

Summary

A new sign, called the bladder sign, has been described to aid in the differential diagnosis of a distended bladder from uterine or ovarian masses. A distended bladder causes obliteration of the normally clear zone adjacent anteriorly and laterally to the pelvic inlet, and blends with the ileum bilaterally forming a clear oval margin and characteristic angle above the acetabulum, displacing the gas-filled recto-sigmoid and cecum laterally. Uterine and ovarian masses are located in the mid-pelvis, rather than anteriorly and when present arise superiorly into the abdomen from this region, and therefore cannot obliterate the anterior clear zone.

Shigellosis: Complications and Associated Diseases in Infants and Children

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One hundred thirteen children with shigellosis were studied. Of these cases, 37 had clinical manifestations limited to the gastrointestinal tract only and 76 had one or more complications. Of the complicated cases, 21 had no identifiable etiology other than shigella, but 55 had associated and/or concurrent diseases.

THE wide variation in clinical manifestations of shigellosis (bacillary dysentery) has been well-recognized. This is especially apparent in infections with *Sh. dysenteriae* seen in the Orient and Near East. Convulsions[5] with shigellosis[1,2,3,4] and such atypical manifestations as Reiter's syndrome [5,6,7,8] have been reported.

We have been impressed by the unusual manifestations and unexpected complications of shigellosis in children.

The purpose of this study is to evaluate the complications and associated diseases of bacillary dysentery by retrospective analysis of 113 patients with shigellosis. All patients were admitted during a five-year period from January, 1962, through December, 1966, to the pediatric services of Louisville General Hospital and Louisville Children's Hospital. Previously, a similar group of patients encountered between 1942 and 1962 in the same hospitals has been studied and reported.[4]

Method of Study

The subjects included in this study were infants and children with shigellosis proven by culture and with clinical manifestations of gastroenteritis. Asymptomatic carriers were not included in the analysis.

For the purpose of analysis the subjects were divided into the following groups:

Group I: *Patients with clinical manifestations limited to gastrointestinal tract only*

Group II: *Complicated patients*

Group II-A: With no identifiable etiology other than shigellosis

Group II-B: Associated with the concurrent and separate diseases

Results

Analysis of Entire Study Group: 113 Cases

A total of 113 cases were available for this study.

Race and Sex: Sixty-one (54%) were males and 52 (46%) were females. Fifty-eight (51%) were white and 55 (49%) Negroes.

Age: The mean age was 40.1 months (range: newborn to 14-3/12 years).

Of 113 cases, 25 (22.1%) were below one year of age. Seventy-six (67.5%) occurred during the first four years of life and 37 (32.5%) were over four years of age. Graph 1 shows the age incidence of shigellosis in relation to clinical groups.

Seasonal Incidence: Fifty-four percent of all cases occurred in the four-month period from August to November. The month with the largest number of cases was October (28 cases) while the fewest cases occurred in April (two cases). (Graph 2)

Organisms Isolated: *Sh. flexneri* was isolated from the stool in 68 (60.2%), *Sh. sonnei* in 43 (38.0%) and the *Alkalescens-Dispar* in two (1.8%) cases. (Graph 3)

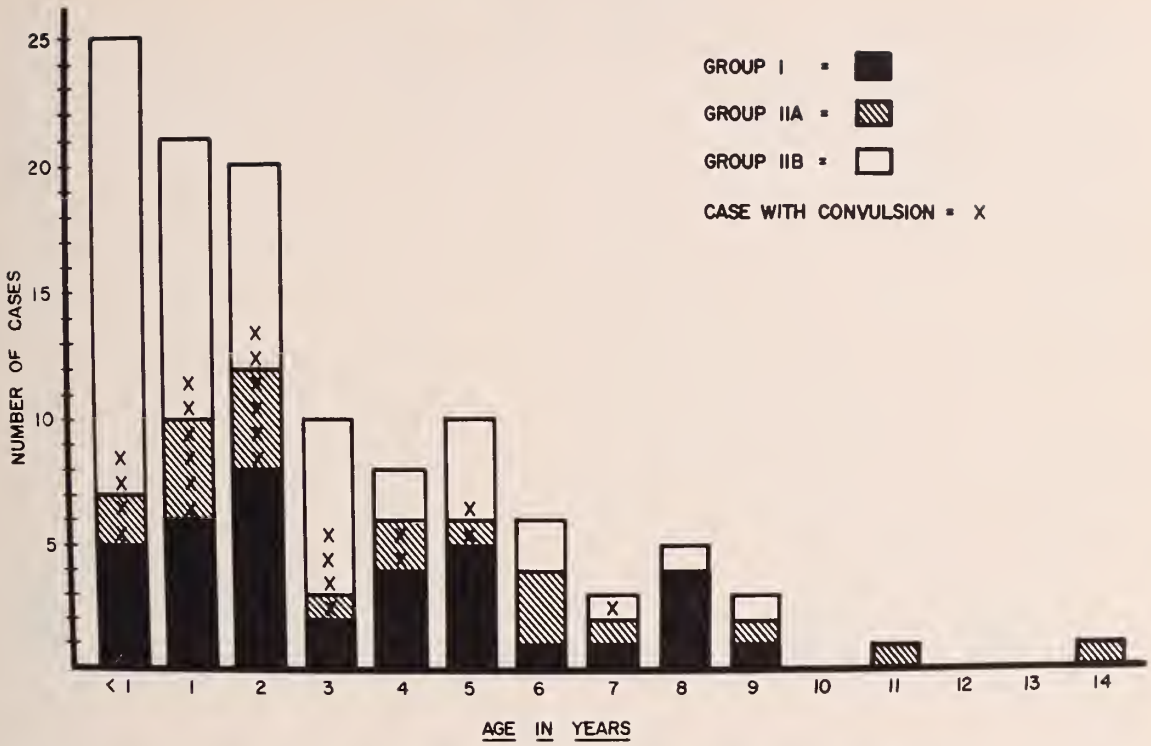
Comparison of Complicated and Uncomplicated Cases

Group I (Clinical manifestations limited to gastrointestinal tract only): 37 Cases

Of 113 cases studied 37 (32.7%) were in Group I. The mean age of Group I was 45.4 months (range: two months to 9.5 years).

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GRAPH 1. Age incidence of shigellosis in relation to clinical groups (cases with convulsion are indicated)

Twenty-four cases were white and 13 were Negro. In 22 cases (59.4% of Group I) the etiologic agent was *Sh. flexneri,* in 14 (37.8%), *Sh. sonnei* and one (2.7%) had *Alkalescens-Dispar.* Clinical manifestations were no different from those well-known to occur in bacillary dysentery, including diarrhea, fever and vomiting.

Group II (Complicated cases): 76 Patients

Seventy-six cases (67.5%) had one or more complications. Of these we classified 21 (18.6% of total) as Group II-A, and 55 (48.7% of total) as Group II-B. The mean age of Group II was 40.4 months (range: newborn to 14-3/12 years).

Group II-A (*Complicated cases with no identifiable etiology other than shigellosis*): 21 Patients

Table 1 summarizes Group II-A.

The mean age of Group II-A was 49.95 months (range: six to 14-3/12 years). Of these 21 cases, 13 (62%) had *Sh. flexneri* and eight had *Sh. sonnei* infections.

One or more convulsions occurred in 15 cases in this group. In four cases the convulsion preceded the onset of diarrhea and in 11 patients the seizure occurred after the onset of gastroenteritis.

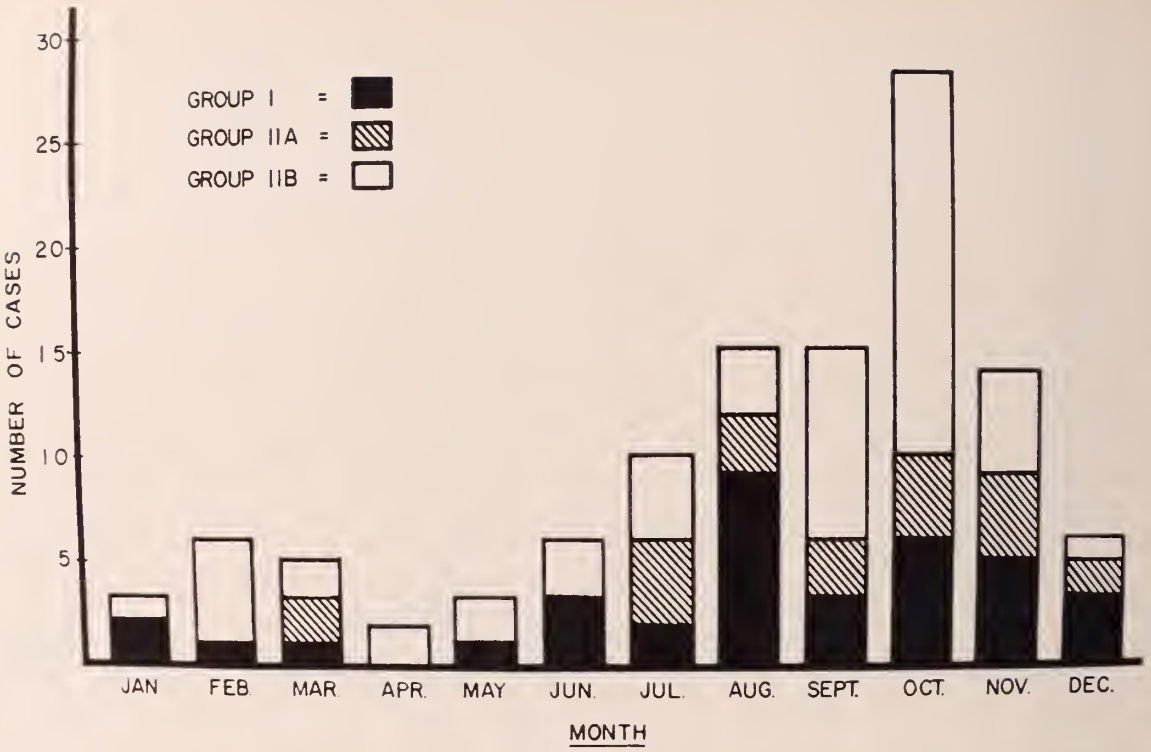
Five cases in this group will be described briefly because of the unusual aspects of their illnesses.

Two patients (seven yr. and six yr. respectively) had definite signs of meningeal irritation and change in mental status with periods of coma. The spinal fluid examination was normal in both.

A 14-year-old Negro female presented with pain in both knee joints, headache, mild abdominal pain and low grade fever. She did not have diarrhea until the third day of the illness. She became completely asymptomatic by the fifth day without any specific treatment. The ASO titer, sedimentation rate and sickle cell preparation were negative.

A six-year-old white female, whose illness had started as typical gastroenteritis, developed severe intestinal bleeding. The hemoglobin dropped from 12 gm% to 6 gm% within 24 hours. She required transfusion of 1,250 ml of whole blood. Contrast roentgenograms of upper gastrointestinal tract were normal. Before hospitalization she was given aspirin, pyralgin and two suppositories of unknown content for vomiting during the first two days of her illness.

A three-year-old white girl with severe dehydration and impending circulatory collapse



GRAPH 2. Seasonal incidence of shigellosis in relation to clinical groups

developed acute renal failure. She was oliguric for three to four days and the BUN increased to 92 mg%. Normal renal function resumed after nine days and she recovered. She did not have the hemolytic-uremic syndrome.

Group II-B (*Complicated cases associated with concurrent diseases*): 55 Patients

Table 2 summarizes Group II-B. The mean age of this group was 30.9 months (range: newborn to 9.5 years). Of the 55 cases, 33 (60.0%) had *Sh. flexneri*, 21 (38.2%) had *Sh. sonnei* and one (1.8%) had *Alkalescens-Dispar* isolated from the stool.

The most commonly affected organ system with concurrent diseases was the respiratory system. Of the 55 cases, 44 had one or more forms of respiratory tract infection, including nasopharyngitis, tonsillitis, otitis media, bronchiolitis and pneumonia. In 21 cases the respiratory illness preceded the onset of intestinal symptoms.

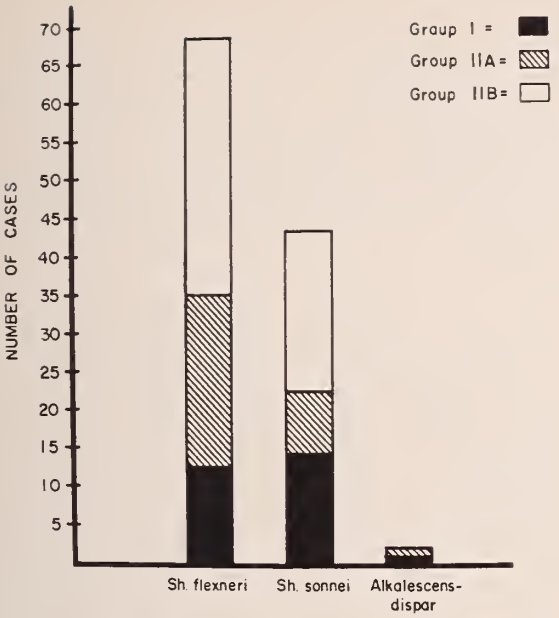
Of all associated diseases (65 diseases) 34 (52.3%) had occurred before the onset of dysentery, 11 (16.9%) after and 11 (16.9%) with the onset of dysentery. In nine (13.9%) the time of the onset was not recorded.

Ten patients of this group had convulsions. In seven cases the convulsion occurred before the onset of gastroenteritis and in three cases afterwards.

The following three cases merit brief descriptions because of their unusual clinical course:

A four-month-old Negro male had bilateral retinal hemorrhage (Roth's spots). This infant had suffered from an "upper respiratory tract infection" for one month before the onset of diarrhea. Three days after the onset of dysentery he had grand mal seizures, apnea and signs of meningeal irritation. Roth's spots in retina were present at the time of admission. He was not dehydrated. The lumbar puncture was traumatic. Serum electrolytes, skull roentgenograms and subdural tap were normal. Blood culture produced no bacterial growth. Three weeks after admission he had recovered completely and the retina became normal.

Two patients, a nine-month-old Negro female, S.C., and her 20-month-old sister, C.C., with a "pertussis-like syndrome" were of particular interest. All other members of the family including the mother experienced a mild diarrheal disease. In both patients the illnesses started as an upper respiratory tract infection with cough and purulent nasal discharge. Four



GRAPH 3. Shigella organisms isolated from 113 cases

to five days later they became febrile and developed a mucoid bloody diarrhea. Also herpetic lesions on the oral mucosa were noted. Several grand mal convulsions occurred in C.S., but not in C.C. After admission diarrhea was controlled easily. The oral lesions lasted for 10 to 14 days. The severe paroxysmal coughing spells persisted for four weeks. The coughing attacks were initiated and aggravated by almost any stimulus and were followed by vomiting. *Sh. sonnei* was isolated from the stool of both patients and the mother. Cultures from nasopharynx, throat and oral lesions failed to reveal any bacterial pathogens. Culture of naso-pharyngeal swab on Bordet-Gengou media failed to grow *B. pertussis*. The cerebrospinal fluid, nasopharyngeal and throat swabs and stools for virus isolations were negative. No serological evidence of recent viral infections was demonstrated in either case.

Convulsions

Of the total 113 cases, 25 (22.1%) had one or more convulsions. The mean age for these 25 cases was 32.4 months (range: one month—7.5 years. Convulsions occurred before the onset of diarrhea in seven cases and afterward in 18 cases. Of 25 cases who had convulsions, 10 had one or more identifiable diseases other than shigellosis. 70.1% of the patients in Group II-A and 18.1% of Group II-B had convulsions.

Twenty-five per cent (17 of 68 cases) of patients with *Sh. flexneri* and 18.6% (eight of 43 cases) of those with *Sh. sonnei* had convulsions.

Eighty percent of the patients with convulsions (20 of 25 cases) had a temperature of 103° F. or greater; four cases with 101° to 103° F., and one case with 101° F. had convulsions. Of all patients who had convulsions in the absence of other associated diseases, the temperature was 102.8° F. or greater. (Table 3) A lumbar puncture was performed in 19 of 25 cases. In two patients the protein was elevated (greater than 40 mg. %). Pleocytosis (greater than 15 cells per cu. mm.) was present in one case.

Blood Cultures

Venous blood samples were cultured from 36 patients.

Sh. flexneri was isolated from blood as well as from stools of two cases. One of these patients, a newborn infant, expired. The second patient, a seven-week-old infant had a severe gastroenteritis and passed necrotic tissue per rectum on several occasions. Both infants were

TABLE 1

Group II-A (Complicated Cases with no identifiable etiology other than shigellosis)

Complications	Number of Cases	Relationship to Onset of Diarrhea		
		Before	After	With
Convulsion	15	4	11	0
Acute renal failure*	1	0	1	0
Meningeal signs and coma	2	1	1	0
Arthralgia	1	1	0	0
Epistaxis	2	0	2	0
Massive G-I bleeding	1	0	1	0

*Also had convulsion

extremely ill with paralytic ileus.

Hemolytic staphylococcus aureus was isolated from the blood of a seven-month-old patient who had bilateral pneumonia and cystic changes of the lungs.

Mortality

Two patients died. In both, *Sh. flexneri* was isolated. One was a newborn infant who contracted the disease presumably at birth and developed symptoms of gastroenteritis and sepsis during the first few days of life. The mother had mild diarrhea on the second postpartum day. *Sh. flexneri* was also isolated from the stool of the mother. Autopsy (died at 5½ weeks) revealed a congenital defect of the mesentery with herniation of the small bowel through the defect.

The second case was a 15-month-old white male with severe hypertonic dehydration and malnutrition. Blood culture was not obtained. Autopsy was not available.

Other Enteric Pathogens in Shigellosis

In six cases more than one enteric pathogen was isolated from stool. Enteropathogenic *E. coli,* in addition to *Sh. flexneri,* was isolated from five cases. *Sh. sonnei* and *Salmonella typhimurium* were present in one patient with cerebral palsy.

The associated pathogens did not appear to influence clinical manifestations in five of these six cases. In one infant with *E. coli* 0119:B14 the illness was prolonged until both pathogens were eradicated.

The therapy was not evaluated in this study. All but six cases received specific antibiotic therapy.

Discussion

Diarrhea, abdominal pain and fever are well-known manifestations of bacillary dysentery. Although the clinical manifestations vary from case to case, the majority of cases in the United States are of a mild type.[6, 9] This has been confirmed recently by Rosenstein's study.[1] Also, the rarity of the classic syndrome in children has been reported by others.

It should be emphasized that all patients in our study were hospitalized. This excluded cases with milder symptoms. Therefore, the incidence of complicated cases in our study cannot be interpreted as representative of shigellosis in general.

Although *Alkalescens-Dispar* is still classified as shigella,[12] it perhaps is more properly excluded from this genus.[13] Two cases were included in this study to comply with the

TABLE 2

Group II-B (Complicated Cases with Concurrent and Separate Diseases)

Complications	Number of Cases	Relationship to Onset of Diarrhea			
		Before	After	With	Unknown*
Respiratory tract Infections**	44	21†	8	10	5
Congenital defect of mesentery	1	1	0	0	0
Failure to thrive and malnutrition	2	2	0	0	0
Skin and/or nail infections	3	2	0	0	1
Cerebral palsy	1	1	0	0	0
Conjunctivitis	4	0	1	0	3
Herpetic lesions (oral)	4	2	1	1	0
Infestation with Ascaris lumbricoides	2	2	0	0	0
Retinal hemorrhage and convulsions	1	0	1	0	0
Pertussis-like syndrome	2	2	0	0	0
Total	65‡	34	11	11	9

*Time of onset not mentioned, of first found on admission
**Rhinitis, pharyngitis, tonsillitis, otitis media, bronchitis, pneumonia and rubeola
†Two patients had rubeola
‡5 patients had more than one complication

classification of *Manual of Determinative Bacteriology* (Bergey).

The high incidence of underlying or concurrent illnesses in salmonellosis is well-recognized in contrast to shigellosis. Rosenstein[1] found an associated disease in 18 of 93 cases of salmonellosis but in only 20 of 399 cases of shigellosis. However, he included non-hospitalized patients.

Our study indicates that the severity of clinical manifestations and incidence of concurrent disease are not related to the organism isolated, age of the patient or season of the year.

In 51% of patients with the associated diseases the illness occurred before the onset of dysentery. It is likely that the associated diseases might have provoked clinical signs of bacillary dysentery from a carrier state.

One remarkable feature of the associated diseases is the high incidence of the respiratory tract infections. This might be simply a reflection of a high incidence of respiratory illnesses in pediatric age group; however, the association of upper respiratory symptoms with mesenteric lymphadenitis in acute bacterial dysentery has previously been encountered in children.[6]

Roentgenographic evidence of pneumonia was found in eight of our patients. In four of these the respiratory symptoms preceded the onset of diarrhea by three to five days. The other four cases developed pneumonia after the onset of dysentery. Two of these patients had bacteremia (one with *Sh. flexneri* and one *Staph. aureus*. Pneumonia in shigellosis has been reported.[8, 14] Shigella organisms have been isolated from the sputum in one case (adult).[15] The mechanism of pneumonia in shigellosis is not known. In 1937, Felsen[14] described the pneumonic form of dysentery as being abrupt in onset with chills, hyperpyrexia and pulmonary manifestations. These findings were transitory and were succeeded within 24 hours by the intestinal symptoms. Pneumonia in our patients was clearly of two types, one preceding and the other following dysentery. This suggests that pneumonia might occur in a carrier state in some cases and in others the pneumonia is a complication of shigellosis.

Reiter's syndrome in shigellosis has been reported.[16,17] Magilith[17] in 1962, reviewing literature, stated that the cause of Reiter's syndrome remains unknown but in children may be related to flexner bacillus dysentery. In our series purulent conjunctivitis was found in four cases. One case had arthralgia involving both knee joints in early stage of illness. No case had a complete Reiter's Syndrome.

TABLE 3

Incidence of Convulsion in Relation to Degree of Temperature

Degree of Fever	Total Number of Patients	Number of Patients with Convulsion
Greater than 103°F.	53	20 (37.7%)
101 - 103°F.	46	4 (8.7%)
Less than 101°F.	14	1 (6.3%)
Total	113	25 (22.1%)

Oral lesions similar to herpetic gingivostomatitis were found in four cases. In two cases in whom viral studies were done there was no evidence of herpes simplex virus infection. The relationship between herpetic stomatitis and shigellosis is not clear. Felsen *et al*[6] in reviewing the Jersey City epidemic in 1934 found herpetic lesions in 13% of cases and these were invariably related with the "meningitic type" of shigellosis. This was not found in our cases.

Hemorrhage into visceral organs, expected to occur in sepsis due to various pathogens, has been reported in dysenteric bacillemia.[18] Autopsy was available only in one case of our series and did not have hemorrhages, although the patient had septicemia due to *Sh. flexneri*. Bilateral retinal hemorrhage was observed in one case and the blood culture was negative.

Unusually severe gastrointestinal bleeding was observed in one patient. The massive bleeding in this case could have been due, at least in part, to adverse reactions of dipyrone and aspirin.

The frequent occurrence of convulsions in shigellosis has been well-documented, the reported incidence being from 4.8% to 45%[1-5,19,20] A meningitic type of infection and toxic cerebral manifestations[5] have been described.

The high incidence of convulsions in the absence of central nervous system infection suggests the possibility of neurotoxin production. So far, the exotoxin (thermolabile neurotoxin) produced by *Sh. dysenteriae* has not been found in any of the other shigella organisms.[9, 21] Endotoxin has been demonstrated

in many species of shigellae. But coliform and other enteric bacilli possessing similar endotoxins behave differently from shigellae in the intestine. Intravenous administration of such an endotoxin results in bowel pathology in some animals but not when given by the oral route.

Sanyal, Hughes and Falkner[4] in 1963 reported from Louisville that 60% of 23 patients with convulsions associated with shigellosis had *Sh. sonnei* as the etiologic agent. Donald *et al* in reviewing 64 cases of shigellosis found that convulsions occurred in 50% with *Sh. sonnei* and 44.6% with *Sh. flexneri* infections. In our study *Sh. flexneri* was predominant in patients with convulsions. The incidence of seizures does not appear to be related with any specific group of shigellae.

Our study agrees with others, in that the evidence of active meningeal inflammation was lacking,[1,2,3,4] convulsions were most commonly associated with high fever[1] and convulsions did not affect the seriousness of the illness.[2, 4] One death occurred among the patients with convulsions. This patient, however, had severe hypernatremic dehydration and malnutrition. Our data confirms that younger children (below four years of age) with high fever are more likely to have convulsions.[1]

Generally, the shigella bacilli remain limited to the intestinal wall and bacteremia is rare. But the occurrence of bacteremia due to various species of organisms has been reported.[7,18,19,22,23,24,25]

Summary and Conclusion

A total of 113 cases of shigellosis observed over a period of five years were evaluated with a special attention to complications and associated diseases.

From this study we conclude, that:

1. Complications and atypical manifestations of shigellosis are common in infants and children.
2. Shigellosis in infancy and childhood is not infrequently associated with concurrent diseases and with possibly predisposing illnesses. Respiratory tract infection is the most frequently associated disease.
3. Convulsions are more likely to occur in younger patients with high fever. The occurrence of other complications and associated diseases are not related to age of patients, season of the year or the type of organism isolated.
4. Manifestations of central nervous system involvement are not accompanied by evidence of an inflammatory process involving central nervous system and are not related to the outcome of the disease.
5. Associated diseases occurred before the onset of dysentery in more than 50% of

(Continued on page 579)

Manuscript Memos

Manuscripts should be submitted in duplicate to The Journal of KMA, an original copy and one carbon, and typed with double spacing. Maximum length of an article should not exceed 4500 words; the Board of Consultants on Scientific Articles prefers that they be briefer than this when possible.

In submitting a manuscript, the author is requested to include a concise summary, not to exceed 35 words, to be used as a sub-title when the article is published in The Journal. The purpose of the summary is to create additional interest and encourage greater leadership.

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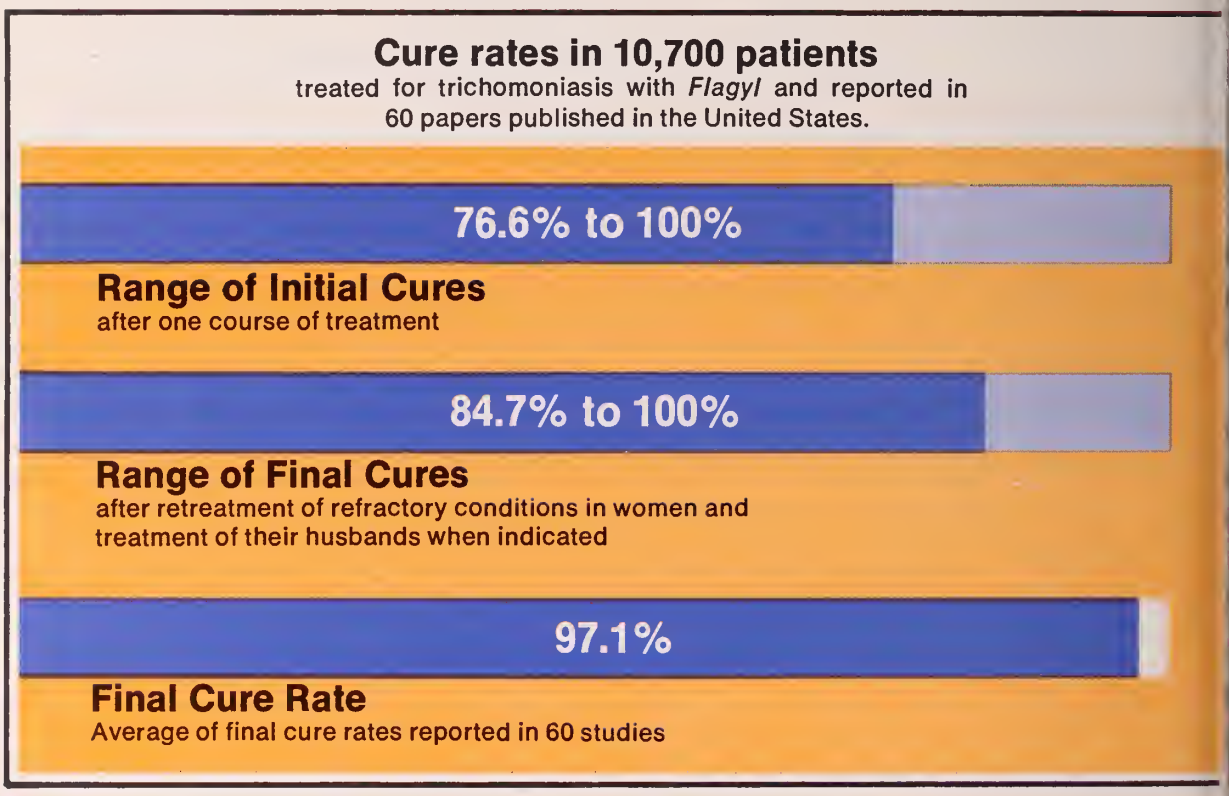
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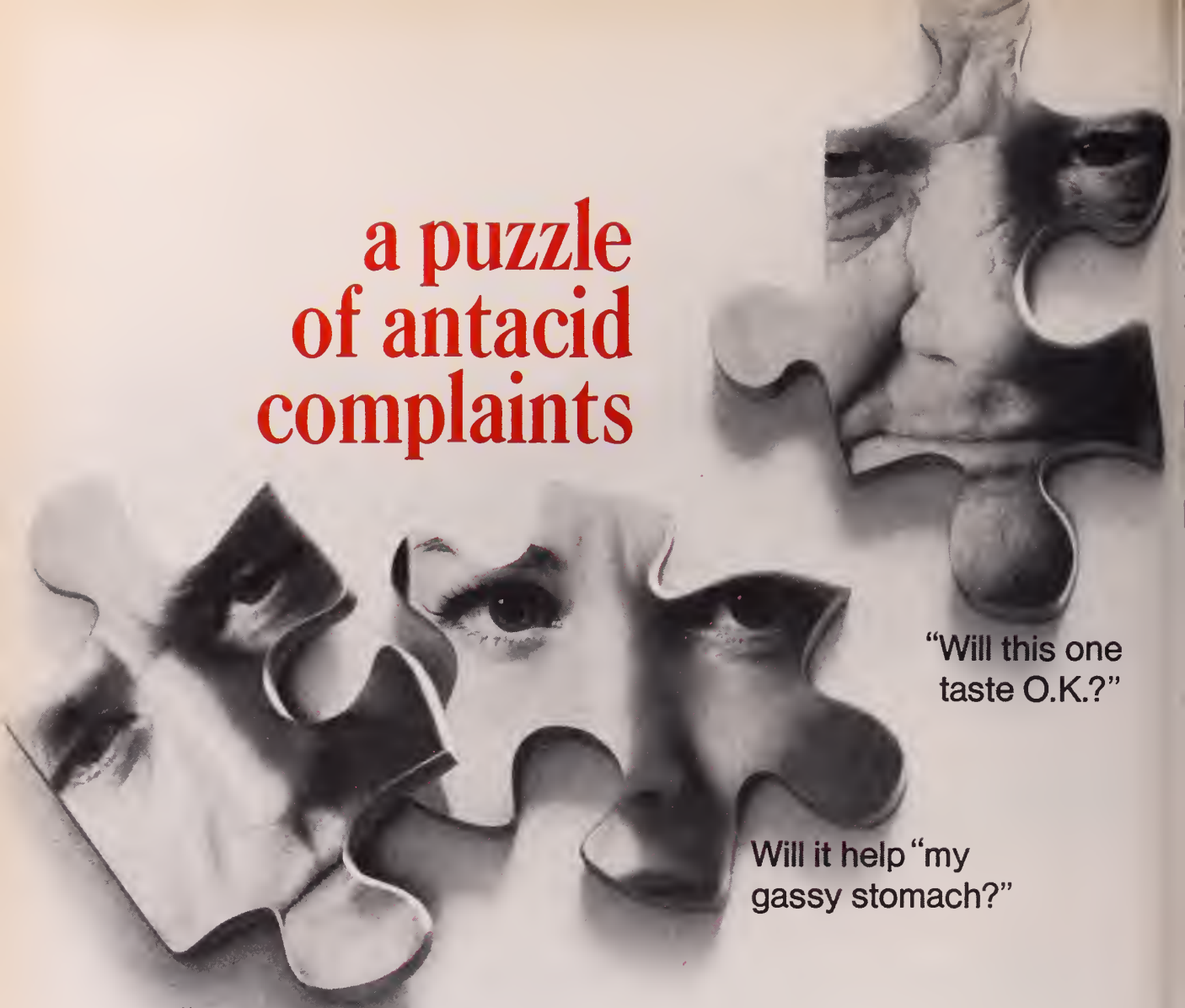
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References: 1. Hoon, J. R.: Arch. Surg. *93*:467 (Sept.) 1966.
2. Danhof, I. E., Personal communication.

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SPECIAL ARTICLES

Med-Ed

THE second biennial KMA Conference on Medical Education convened January 26, 1968, at Park Mammoth, Kentucky. The format followed closely that of the initial gathering in 1966—that is, presentation of a few papers representing diverse views on key educational issues, followed by general discussion periods. Registrants were divided evenly between representatives of the KMA and of the medical schools, with the University of Louisville and the University of Kentucky fielding teams of equal strength. Andrew Moore, M.D., Lexington, served most ably as chairman.

As you can tell from even a cursory look at the following papers, the two subjects-at-issue—(1) "The Mechanics and Philosophy of Basic Sciences Curriculum in Teaching and Research", and (2) "The Impact of Socio-Economic Changes on Medicine"—were approached vigorously and with definite ideas. For basic science teachers and clinicians to meet and discuss common problems *was* medical education; the feeling emerged that the basic scientists very much need to realize the extent of the socio-economic pressures being applied to clinicians (both academic and non-). Clinicians, on the other hand, need reminding, from time to time, that unless our schools continue to present a strong foundation of basic science the treatment of diabetes, or congenital heart disease, or any disease for that matter, will require only technicians, and produce only technicians—and medicine's magnificent advances will cease.

We present in this issue the four papers which were concerned with the strengths and weaknesses of the basic sciences curriculum. Next month the remainder of the talks, about socio-economic changes, will be published. Any letters to the editor on these topics will be favored for publication.

WALTER I. HUME, JR., M.D.

The Mechanics and Philosophy of Basic Sciences Curriculum in Teaching and Research "Its Relationship to the Medical Student"

THOMAS B. CALHOON, Ph.D.*

Louisville

THERE are many factors which come together to determine the form of a basic sciences curriculum in a medical school. Our concern for the next few minutes is to discuss the relationship of the basic sciences curriculum to the medical student. I shall describe the major types of basic science curricula used in medical schools and in doing so, will bring out the mechanics and more importantly, the philosophy of the basic sciences curriculum in teaching and research as it relates to the medical student.

When devising a curriculum in a medical school I think that we would all agree on a few general principles. These are: that the student should learn how living matter operates normally; how living matter operates abnormally; and what to do about it if something goes wrong.

It is generally agreed that physiology and pathology play central roles in the basic sciences curriculum. After all, by definition physiology is the study of the normal functioning of living matter and pathology is the study of the abnormal functioning of living matter. Usually, physiology comes later in the first year of school, after the students have completed the anatomies and most of biochemistry. In this way, physiology can build upon the knowledge that the student gained in these subjects to eventually arrive at, we hope, a rational picture of the normal functioning of the living animal. Pathology usually comes late in the second year after the students have completed microbiology and pharmacology. Pathology then takes the synthesis gained by the students in physiology, adds to it the knowledge the students gained from microbiology and pharmacology, and at-

*Professor and chairman, department of physiology and biophysics, University of Louisville School of Medicine

tempts to build a rational picture of the abnormal functioning of living matter.

Now, how much of each of these topics is necessary? This is where there would be considerable difference of opinion I am certain, among all of us. By tradition, medical schools in this country have been four year schools. I believe that if we could poll the basic sciences medical educators they would vote for a five year medical school because of their awareness of the vast amount of basic sciences available and necessary for the development of the physician. On the other hand, the demands of society for more physicians and a certain cup of human kindness suggest that the medical school not be more than four years and possibly reduced to less than that. The President's National Advisory Committee on Health Manpower recently recommended that medical schools revise their curricula with the goal of reducing the amount of time the student spends in formal education.

At the present time there are three general approaches to the medical school curriculum. The first of these I would call the *Traditional Curriculum*. This is the type of curriculum under which most medical schools presently operate. There are more than 70 medical schools using this curriculum. This curriculum is like that which most of the physicians in the audience experienced. The students take the anatomies, then biochemistry, sometimes overlapping to some extent with physiology, then microbiology and pharmacology, and finally pathology. Blocks of time are assigned to each department and the students pass through the curriculum in lock-step fashion. This type of curriculum is what I would call Generalist Oriented. By this I mean that all of the students take the same courses. The curriculum assumes that there is a large common body of basic knowledge that all physicians need to learn. Of course, different students will retain that part of the total information which is most relevant to them, dependent upon their interests, background, and goals. Thus there is considerable personal selection of the material to be retained by the student. In this curriculum, however, we have the assurance that all of the students come in contact with all of the basic sciences material at least once in their careers. There is, of course, the problem that the total material necessary to learn is steadily increasing. If the curriculum is already packed, then a decision must be made of what is less relevant and can therefore be thrown out. This is a problem of all curricula however, regardless of form.

The second type of curriculum is the *Integrated Curriculum*. Western Reserve University comes to mind when we think of the integrated curriculum. Here the student passes through the basic sciences by organ systems rather than by departments. When the students are discussing the cardiovascular system in the anatomies, they are also getting the cardiovascular system in biochemistry, physiology, microbiology, pharmacology, and pathology. When they finish the cardiovascular system then all departments pass on to the pulmonary system, kidney, or some other topic. Often, the organ systems are taught by committees specifically assigned by organ systems.

This type of curriculum is still Generalist Oriented. That is, it assumes that there is a vast body of basic knowledge that all students should come in contact with at least once. I suggest that this type of curriculum creates a serious problem in the learning process. This is the lack of repetition. I have often heard it said that there is too much repetition in the basic sciences, too much time is being wasted. I submit, however, that repetition is an important psychological technique which enhances the learning process. In the integrated curriculum the students discuss an organ system once and then pass on to the next topic. At least, in the traditional curriculum, the student hears the cardiovascular system discussed by many different departments at different times throughout the first two years.

The third type of curriculum is the *Multi-Tract Curriculum*. There are nine medical schools which use at least a version of this type of curriculum. In this curriculum there are several different pathways that the student can take through medical school. When he enters school he chooses a pathway which may be different for different students. This curriculum is based upon the principle that not all physicians need the same background, and therefore, I would call this type of curriculum—Specialist Oriented. Thus, in a pure multi-tract system there would be three or four different tracts which students would choose dependent upon their interests and goals. I assume that there would be a tract for students highly scientifically oriented, let us say in molecular biology for example. These students would probably be required to carry out some research work as part of their training. A second tract would be a humanist oriented tract. I suppose that the product of this tract would become psychiatrists, physicians interested in rehabilitation, geriatrics, etc. A third tract would be for the student interested in biochemistry-physiology and I assume they would go into areas like endocrinology, internal medicine, etc. One could devise many different types of tracts for many different types of students. Of course several problems arise. First, if a basic sciences department taught several different levels of courses to suit the several different tracts, this would require more faculty, more space and equipment. Thus, there is a sizable financial problem in setting up such a pure multi-tract curriculum.

The *Core-Elective Curriculum* is a compromise between the traditional and the pure multi-tract curricula. The University of Louisville was one of the first to adopt this form of curriculum. It is predicated on the assumption that the body of basic information that all students need to know (the core) would occupy less than the total amount of time reserved for the basic sciences. In addition, the student is required to take some electives courses in which he is free to pursue his own interests and talents. There are several problems which arise from this

form of curriculum. First, what shall be the size of the core? I can assure you that at the University of Louisville, as well as at other schools, there is considerable difference of opinion. In most medical schools using the core-electives curriculum the core occupies three-fourths of the total time of the first two years. At the University of Louisville the core occupies two-thirds of the first two years. I read recently where the core will occupy only one-half of this total time at Dartmouth (Science, Vol. 159, pp. 284-286, 1968). So there is considerable difference of opinion concerning the minimal size which the core should attain. A second question which arises is how shall the electives time be handled. One approach is the shotgun method, in which the student is given a large list of electives from which he is free to select. I prefer the multi-tract electives system. In this system of electives each student would be frozen into a tract of sequence of electives. There might be five or six different electives tracts for the humanist, molecular biologist, etc. Once the student selects a tract of electives he would be required to follow the tract to completion. This way we would make certain that the student pursues electives which go in increasingly greater depth into a particular facet of medicine.

The major problem which besets all forms of curricula is the problem of content. What shall the core consist of? The core of basic information is ever increasing. It must have been nice 75 or 100 years ago to teach physiology to medical students, for almost everything could be blamed on Vital Spirits. In today's modern medical school we teach whole courses in subjects which were only lightly touched upon even 10 years ago. For example, 10 years ago most schools only mentioned genetics in passing through embryology or histology. Today there are intense courses taught in genetics, behavioral sciences, environmental sciences and even gravity-free states. We might think that a course in gravity-free states is a little premature, but after all we should be concerned with preparing students for the medicine of 10 or 20 years from now. Who knows, we may all be up in the air by then.

We are forced by the sheer volume of information to narrow our concept of the physician. We are forced to select and teach that material which is most immediately needed by the physician—that which is most practical. I suggest that this is intellectually wrong! If we set as our goal to teach students only those things directly applicable to medicine today then that is all they will know. Basic sciences departments are sometimes accused of wasting time discussing all sorts of irrelevant material. I have heard deans and chairmen say that we should "cut out all of the fat". Yet some of the material which we teach serves as background which will help the student better understand some more practical clinical information which he will get later. For example, we spend some time on the nature of the resting membrane potential. We discuss with the student the various sodium or potassium pumps, Nernst equations, etc. which are necessary to the understanding of the origin of this potential. Later on in the course this information will become invaluable to the student in understanding the electrocardiogram. Some of the material we teach is an effort to project the student into the future. It is important to warn the student that a particular body of knowledge is rapidly changing and that what he is being taught right now may well change by the time he finishes his residency. For example, in the early 1950's, when we discussed the kidney we "went off on a tangent" and mentioned the swim bladder in fish. We pointed out that in the wall of the swim bladder were some hair-pin shaped blood vessels and that we know this arrangement of structures was the mechanism by which the wall of the swim bladder pumped oxygen into the lumen in the bladder. The oxygen pressure in the bladder could exceed the ambient oxygen pressure. We then pointed out that in the kidney there were series of hair-pin loops of nephron tubules and of blood vessels, we felt that these structures were putting something into or taking something out of the medulla of the kidney and that this has something to do with the manufacture of urine. We recognize today, of course, that the countercurrent multiplyer system of the kidney causes the concentrating of the glomerular filtrate. We feel that it is required of us to give the medical student an appreciation of the fact that this body of basic information is ever changing and hopefully becoming more precise.

We must be concerned then with turning our physicians with sufficient breadth of knowledge to be able to comprehend as well as practice the medicine of 10, 20, or 30 years from now.

In summary, I hope I have given you a little idea of what we in the basic sciences hope to accomplish, how various schools are approaching this task, and what some of the concepts and problems are in the basic sciences curriculum in medical schools.

"Its Relationship to the Medical Student"

Fred J. Bollum, Ph.D.*

Lexington

OUR first speaker has presented a most useful summary of several possible approaches to the medical curriculum. In this framework the UK curriculum could be described best as a "core-elective" curriculum with about 10 percent elective time. My presentation will be somewhat more general on the philosophic side and more specific—applying to the University of Kentucky curriculum—on the mechanical end. This discussion could best be called what I think the University of Kentucky is trying to accomplish in the basic sciences curriculum because I have no particular qualifications as an expert in this area. The philosophical part is based on observations of human nature as a professional biochemist, educator, and parent, and the mechanical part is the result of some brief discussions with members of the other basic science departments at the University of Kentucky. First and foremost I think that we all agree that our aim as medical educators is to train individuals for a *professional* life in medicine. But just what the term "professional training" includes is really the essential matter for continuing discussion. I believe that we all agree that when we say professional training we mean just that, in the highest and best sense of the word. To me, the two most important attributes of professional life, in this sense, are flexibility and dedication to purpose. Dedication to purpose (and certain other social and political aspects of medicine) is not a subject of formal training and comes largely from direct observation and emulation. Hence this attribute must be attended to in the selection of students and medical faculty. And finally, I hope we all agree that our purpose in this professional training is to provide the best possible medical care.

My thesis here today is very direct. I think the basic science curriculum at UK is designed to provide a double strength foundation, with its first strength in the provision of a working knowledge of biology, chemistry, and physics, with special emphasis on the application of these sciences to medicine. This aspect, the working knowledge, provides a basis for understanding current medical practice or medical art as it exists at a fixed point in time—the time the student passes through the clinical years. But we must also take future time into consideration since clinical training and practice will undoubtedly change. The second strength of basic science training is in learning to *use* solid information to solve practical problems. A set of operational models that allow interpretation and acceptance or rejection of new developments must be presented to the students. This is the aspect commonly expressed as "problem solving". These are the overriding ideas that constitute the philosophy behind present day professional medical training. The basic sciences provide for understanding a mass of material, and flexibility. Flexibility and change are the most irresistible strengths of American medicine. Each of you must be aware that your practice changes year by year, and I hope that you find your professional training has prepared you for these changes.

By this time each of you may be thinking that high motives do not necessarily lead to great accomplishments. Just what are the practical aspects of the "education for change". One may argue that in fact the so-called "basic sciences" are also changing—how can changing facts be claimed to be basic? This is in fact the difficult part of the teaching profession. What biological facts and laws are irrevocable? How can we predict which ones will be irrevocable? Are we really teaching the right things? Are we teaching from the point of view of current research only? Where do we start on any particular topic and where do we stop? Obviously, we must cast our individual teaching in a way that prepares the student for this change. Our courses then must be a mixture of topics, each topic having a certain qualitative value. *A careful choice of topics is essential.* Point number one then is that there must be some basic structural description on each course. Second, there must be operating models that show how these structures work in biological systems. Third, there must be correctional aspects on these structure-function models. We must show how to reshape the models. And fourth, we must make note of the fact that in any real case we are dealing with systems that are mixtures of known and unknown parts and we must try to develop the facility to cope with this.

Now I think these things help us to understand the basic tenets of professional life. The student must be well-informed so that he can recognize clear and obvious solutions with unerring skill. Then, he must learn to be adaptable and he must know when to adapt. These facts are obvious. The most common situation he will face, however, is when he must deal with a case where solutions are by no means clear and the facts are not even obvious. Here he must make analyses correctly, evaluate information that is good and bad, and decide on a course of action. This course of action must also be susceptible to correction.

As one considers each of the basic science departments in the light of the two fundamental con-

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cepts of basic information and problem solving, I think it should become clear that the emphasis on one or the other of these concepts will be different within the various departments. This becomes particularly clear when curriculum changes are envisioned, and for that reason I will mention some of the recent upheaval that has taken place in our curriculum.

Since the first KMA-UK-UL Conference on Medical Education in January, 1966, the curriculum at the University of Kentucky Medical School has been undergoing some revision. It went into effect this fall. As you may well expect, this curriculum revision was brought about largely as a result of agitation by younger members of the Medical School faculty who felt that the previous curriculum was much too rigid and, in addition, it had been set up without their advice and consent. Naturally, they felt that some enormous changes should be made. In this particular area I represent the middle ground, being neither a long time member of the UK faculty nor particularly young. Thus I understand both the practical considerations that had to be met in setting up the original curriculum at UK, and yet I sympathize with the idealism of our younger faculty members. I would not like to make a point by point comparison of the old curriculum and the new curriculum in the pre-clinical years at the UK Medical School. I can, however, make several general statements about the curriculum change and then discuss briefly what the changes mean to the student and the kind of adjustment that has been made in the individual basic science departments.

At the risk of over-generalization, I believe that the major criticism of the old curriculum was the rigidity and completeness of time scheduling for the medical students. In other words, the younger faculty felt that the medical students were scheduled from 8 o'clock in the morning until 5 o'clock in the afternoon, during which time their instructors presented a wealth of didactic and laboratory material. The evenings were to be spent in reviewing and memorizing this material. Some individuals claimed that there was no time allowed natural body functions. The medical student was in a lock-step program in which any deviant behavior could result in a performance that was unsatisfactory according to the norm. The result of the curriculum revision was two-fold. First of all, some pressure was removed from the grading system by changing from a letter grade (A,B,C,D,F) to pass, fail, or honors. This revision makes no difference in free time, but some day to day and semester to semester stress was thought to be removed by this measure. A detectable change in free time was effected by reducing the total number of scheduled hours in the first year from 1,161 to 1,018, a reduction in schedule hours of about 140 hours, or slightly more than 10 percent. The reduction in total hours was meant to allow the student to play a greater role in his own education by pursuing independent study, electing courses throughout the university, or simply concentrating his efforts on the reduced schedule load. To facilitate elective selection the freshman year was returned to the normal University calendar. It is of interest in passing that in the first year of this reduced scheduling slightly more than one-half of the first year class have decided to take an elective. I also note that only four of 40 chose non-clinical electives. These then are the major general changes and I think they will be difficult to evaluate in any quantitative way. In principle I believe this to be a good change—if only to acknowledge to the student that his education is *his* responsibility.

The effect of reduced time scheduling on the course content in the basic science departments is somewhat varied. Each change in the curriculum, however, small, requires a great deal of rescheduling and rearranging of time and topics. Since this rescheduling usually affects more than one class, the mechanics of introducing these schedule changes are always a little bit difficult. In discussing the effect of schedule changes, notably reduction in schedule hours with various departments, adaptations to the reduced number of scheduled hours varied somewhat depending upon what the faculty considers the major instructional problem in that department. First of all, I should repeat my initial statement about philosophy, because in discussing these schedule changes with various department chairmen, all departments expressed the same basic philosophy. That is, that there is a certain amount of fundamental information in each course presented to the medical students. This fundamental information must then be discussed in a way that the student sees how fundamental information can be used to solve simple problems in this area of biology. But within each basic science department the amount of basic information and problem solving discussion varies. Where basic structural information is a major part of the course, for example in anatomy, a reduction in number of hours is a problem. Reduction in hours simply means that certain topics cannot be covered in the basic course. These topics must be left for independent study or coverage during some later (unspecified) time of the student's medical education. In biochemistry, physiology, and pharmacology complete coverage of the subject has never been considered to be an attainable goal (at UK). You are all well aware of the thick textbooks on these subjects, and each year they grow by at least 100 pages. In a textbook, new information is simply added and old information is not necessarily subtracted. But each year our courses have a fixed number of hours. In these three departments then, the major adjustment is to attempt a re-arrangement of time over lecture time (the major amount), laboratory time, and conference time. In biochemistry, our principle adjustment has been in the number of lecture hours. Our course has been shortened, but we feel that we can re-arrange the topics to be discussed to accommodate for the loss in hours. At the present time, we think our laboratory schedule is at a useful minimum, and the only other place for an hour reduction is in the conferences.

Now my personal opinion was that the conferences should have been reduced, but I think that might be done by internal re-arrangements at some later time. Physiology on the other hand has made their schedule reduction largely through reduction in laboratory time with some continued reduction in conference hours. Pharmacology has taken a look at its lecture topics and has removed one or two topics that may be of less interest to the medical student. Everyone agrees that the adjustments might be beneficial although in certain disciplines they are more difficult to make than in others. We all hope the free time generated for the student will be used in some gainful manner. In any case, it will be difficult to evaluate (impossible at this moment) and I believe that everyone concerned was impressed with the difficulties of making even this minor adjustment. I think no one looks forward to a major change in scheduling. It is my opinion that considerable strengthening of our courses could be accomplished by a continuing review of topical content on a school-wide basis.

The title originally assigned to this presentation included "research" as part of the matter for discussion. Let me make it clear at the start that *research* is a state of mind, not a physical place or stereotyped kind of behavior. We do everything possible to encourage our students to develop this inquisitive state of mind. Research is the attitude that permits inquiry and change—much the same attitude that has generated this conference today. Perhaps the curriculum changes will foster the inquisitive mind. Although I have minimized and generalized the schedule changes effected in our curriculum, let me assure you that this might be rather deceptive. By reducing the stress on grading and liberating a little free time we have acknowledged the adulthood of the student. Now he must respond. From the choice of elective, roughly 40 percent of the students say they will concentrate on the existing curriculum and 60 percent say they will expand their training through electives. In the choice of electives the students are almost unanimously clinical in orientation. This is what one might expect and desire for physician-candidates. They want to approach the subject that fascinates them.

As the students become better acquainted with clinical material through their new electives, new problems will arise. Some will be social, some economic, some psychological, etc. Some will concern basic science—and at this point the clinical instructor and the preclinical student are back talking to the basic science instructor. When a preclinical student hears his *clinical* instructor and *preclinical* instructor talking in the same language, he is reassured that basic science nas some relevance to his clinical interest. He attaches greater significance to his preclinical studies *and* finds it is indeed helpful in understanding his clinical work. He and the friends he influences become better all-round students because of this.

In a nutshell, a little "free time" has been made available to medical students on the Lexington campus. As interested parents and teachers we should observe this development carefully. Do the students accept the challenge? If they do, how can we continue to make changes for better professional training? The "Medical Students Report" (from seven Harvard medical students) makes many suggestions that are now present or possible in our curriculum. Some of the changes are quite drastic. The conservative voice resists drastic changes such as complete deletion of laboratory exercise (except anatomy & histology, where information gained is directly related to time spent). Medical educators need the considered opinions of practical physicians. What are your thoughts on curriculum change?

"Its Relationship to the Practitioner"

TED BALLARD, M.D.*

Lexington

I WOULD like to thank Doctor Moore for inviting me to participate in the KMA Conference on Medical Education. The topic is certainly one of great importance to the medical profession. I would first like to define what I feel the philosophy should be. The primary purpose of a medical school is to teach physicians to treat patients. To do this, the instructors interested in teaching should teach and those interested in research should do only research. Too often, instructors who are interested only in research are teaching. There should be more emphasis on those areas in the basic sciences that apply to clinical medicine. Too much time is spent on a lot of theory and detail which has no clinical application.

Enough about philosophy, now what about the mechanics? Courses such as biochemistry, bacteriology and embryology should be taught in pre-med. Along with these in pre-med we should have accounting, abnormal psychology and other non-science courses, thus allowing more time in medical school to teach clinical medicine. Points of clinical importance from these courses can be reviewed at the appropriate time in medical school. I feel the basic sciences should be studied in a block system, where for example, the GI tract is studied in relation to gross anatomy, micro anatomy, physiology and pathology. This knowledge will then be better and more easily applied to the clinical courses. Areas

*Physician representing the Kentucky Medical Association

of clinical importance should be stressed and details not clinically applicable deleted. If the student wants more non-clinical, theoretical details, he could pursue this as an elective. Facts worth clinical application, that are discovered later, could be obtained by the practitioner in refresher courses.

Gross anatomy could better be remembered if autopsy material were used instead of the cadavers. Also, anatomy should be taught all four years to better apply it to clinical medicine. Pharmacology should have more of a slant along the therapeutic lines with mechanisms of action, indication, contra indications, side effects, and dosage stressed. Human behavior (sex, etc.) should be incorporated in medical school courses to help the physicians better understand the emotional aspect of disease.

By doing all of these things, I think the basic sciences could be taught in one to one and one-half years, thus allowing more time for studying their clinical application.

In summary, what I have attempted to present are my ideas as to how medical schools could produce ever better physicians. By presenting the basic sciences in such a manner as to provide a more practical working knowledge, which can be readily applied clinically, the schools would, I feel, accomplish this goal. This in turn would motivate the graduate physician to pursue his education continuously. By doing this, we can thus be assured of modern day physicians.

"Its Relationship to the Practitioner"

W. Fielding Rubel, M.D.*
Louisville

TODAY we are beset more than ever before by the problems of delivery of medical care and by its ultimate determinant methods of medical education. The problems of medical education are not just those of a fantastically proliferating body of knowledge but also those of philosophy and organization. Throughout history medicine has been a faithful mirror to society.

Social, economic, scientific and technological upheavals have quickly been reflected in patterns of medical education and medical practice. The prototype of modern medical education came into being a mere 70 years ago when Flexner ignited the public's criticism of proprietary medical education to set the stage for widespread adoption of the Hopkins model during and after World War I. It is only since World War II that basic and clinical research—the scientific grounding of medical education—and full development of specialty training—the channel for incorporating the results of medical research into medical practice—have reached the heights predicted for them a half-century ago.

But we must look beyond the medical school for fuller explanation of why these monumental achievements, brought about only after decades of planning and effort, are now judged inadequate by the society we serve. It is logically inescapable, almost with the certainty of natural law, that profound shifts in social tastes and expectations should bring a public discontent with a seemingly stable pattern of medical care. The partnership of science and service has succeeded almost too well. In new standards of excellence and its new therapeutic potency, medicine has fed society's hopes for a veritable Utopia of health.

It is, therefore, understandable, that we listen somewhat ruefully to complaints from our friends while dodging the brickbats of our more caustic critics.

I would like to comment on the basic medical sciences as integrated parts of our scheme of medical education and health. In this winter of discontent, the inadequacies and disadvantages of our system of medical education and care are relentlessly spotlighted. As is often the case, some of our alleged shortcomings are the source of some of our most admired strengths. To many of us in clinical practice, it is becoming increasingly apparent that drastic changes are to occur in both our health services and systems of medical education. This is a price being demanded by our society and a bill we are compelled to honor.

The patterns that are emerging in re-organization of health services will dictate great changes in the methods and philosophy of medical education. At the bottom of this pyramid of change will stand the so-called basic medical sciences. The first step would seem to be revision of our concept of what constitutes so-called basic medical sciences.

First, and foremost, is the place of so-called reductionistic biology in the education of students. It is now the science most basic to medicine and comprises the growing core of all basic medical sciences. Shall medical schools continue to define molecular biology as the basic medical science or shall it take its place with chemistry and physics as a prerequisite to the study of medicine? The answer may come soon, not because wise men will reason together but because universities cannot afford to support multiple departments of molecular biology.

In developing medical schools, we see the beginning mergers of biology departments within the parent university. Instruction for all students, undergraduate, graduate, and professional, is given by the university departments. If modern biology is to be-

Physician representing the Kentucky Medical Association

come a pre-professional discipline, and if all basic medical sciences continue to become more basic and less medical, the vacuum between these and clinical medicine will indeed become profound.

Already it has created the need for expanded bridge courses which, in effect, comprise our merging re-definition of the clinical relevant basic sciences. These are logically taught by able clinical investigators and superior practitioners who are today's basic medical scientists. Thus, there is a discernible pattern. At its base is the increasing adoption of so-called core curriculum in medical schools throughout the country. Schools are finding it possible to find a course subject matter which is to be required of all students aspiring to the M.D. degree. Beyond the core program would be elective time with individually tailored sequences, each student choosing in accordance with his preceived academic needs and further career interests. These are clearly evident trends and changes now in progress. They represent earnest efforts to adapt the goals of medical education to modern society and to increase its efficiency. However, doing something differently is not the same as doing some different. By its nature, innovation is much more rare than change. Nonetheless, if present trends continue we may see a fundamental re-structuring of medical education. First, the medical school may well evolve into a college comparable to colleges in the university. In the place of the fixed medical curriculum, we may see the emergence of multiple majors within medicine. Each department within the college becomes, in essence, a school, offering courses at undergraduate and graduate levels. Some of these will be required of all candidates for the M.D. degree. Others will be offered for selected students or for selected majors. The numbers and types of majors offered would be determined by the college's educational goals and resources. For instance—a major in academic medicine would be available for the student who definitely plans a career in research; depending on his interests, he would supplement the core curriculum with additional courses in scientific medicine and related basic disciplines. A different major would be offered to the student who intends to enter full-time specialty practice. A third major would be designed for the student intending to enter family practice, delivering total medical care to his patients. A fourth major would be available for students who plan a career in community or administrative medicine. A fifth major would resemble the basic program now offered by most medical schools for the student not decided as to his further career in medicine.

Such an academic re-organization would eliminate one aspect of the current bottleneck to provide needed numbers and kinds of medically trained personnel. They are needed not only to carry on the primary purpose of medicine but the increasingly important functions of administration, policy-making planning, analysis, educational research and extension of the social and behavioral sciences into the field of medicine.

We can see several patterns in this disturbing array. One is the greater efficiency of education, preserving faculty and student time, yet increasing and improving output. Another is the academic re-organization of the multiple disciplines joined by molecular biology.

A fusion of efforts between medical school and parent university is economically dictated. Another pattern is the more purposeful management of the curriculum, a precursor to overall re-organization as the medical school seeks a new form better suited to its multiple and diverse functions.

References

1. Report of the Citizens Commission on Graduate Medical Education: The Graduate Education of Physicians. Chicago, American Medical Association, 1966.
2. Report of Ad Hoc Committee on Education for Family Practice of the Council on Medical Education. Chicago, American Medical Association, 1966.
3. Sanazaro, Paul J.: Emerging Patterns in Medical Education. Mayo Clin. Prac. 42:777-790 (Dec.) 1967.
4. Evans, L. J.: The Crisis in Medical Education. Ann Arbor, Mich. The University of Michigan Press, 1964.
5. Darley, W., and Somers, Anne R.: Medicine, Money and Manpower. The Challenge to Professional Education. I. The Affluent New Health Care Economy. II. Opportunity for New Excellence. III. Increasing Personnel. IV. New Training for New Needs.

New Eng. Journal of Medicine 276: 1234-1238 (June 1); 1291-1296 (June 8); 1414-1423 (June 15); 1471-1478 (June 29) 1967.

(Series to be concluded next month)

EDITORIALS

The Group Practice of Medicine

THE National Conference on Group Practice was held in Chicago in October, 1967, and the report of that conference is of interest to all physicians who are concerned with the future form and organization of medical care in the United States. The conference was sponsored by the U.S. Department of Health, Education and Welfare. The specific objective of the conference was to promote group practice. It seems to be factual to state that the Department has previously concluded that one of the ways to improve delivery of health service and to counter the rising cost of medical care is by group practice. It was stated at the beginning of the conference that the optimum method of organizing our health manpower and resources to provide high quality medical care was through group practice. The assigned task of those taking part in the conference was "to explore ways to stimulate the group practice of medicine."

Group practice was defined as: An association or group of persons with the capability and intention of making available coordinated comprehensive health services and of assuming responsibility for family care. The advantages and disadvantages of group practice to the individual physician and to the individual consumer of health services were considered during this conference.

The Liaison Committee of the American Association of Medical Clinics, the American Medical Association and the Medical Group Management Association first met in 1960 and developed a factual booklet for physicians who might be contemplating establishing a medical group or who might be thinking of joining an already established group. This same Liaison Committee revised this information in 1967.

The available statistics indicate a growth in recent years of this type of medical practice. In 1959, eight percent of all physicians in private practice were engaged in group practice on a full or part time basis according to a study conducted by the American Medical Association. In 1966, the percentage was approximately 15.6 percent. This growth was largely confined to single specialty groups. Growth of multi specialty groups in this same period was only from 7.1 percent to 8.9 percent. A recent study by the Association of American Medical Colleges indicated that 22 medical schools out of the 72 that participated in the study reported they had in operation a school-wide formal group practice plan by clinical faculties. An additional 16 schools said they were planning to organize such a group. Fourteen of the 22 existing plans were organized as a part of the medical school and the remaining eight were a separate organization of the faculty. The professional billing for the physicians' fees was handled by two of the medical school business offices; 14 were handled by a separate group practice business office; and in six instances the billing was handled by the hospital business office. The availability of private health insurance, Medicare and Medicaid has had its effects upon the charity hospitals that medical schools have always depended upon so heavily. This growth of health insurance, both private and government, will likely be one of the factors in the further development of group practice by medical school faculties.

At the present time there are powerful segments of our society that are concerned with the cost and quality of medical care. Examples of these segments are the federal government, labor unions and insurance companies in addition to organized medicine. In the case of the federal government there seems to be established the conviction that group practice does have a favorable effect both on quality and on cost of medical care. For example, in Secre-

tary of HEW Wilbur Cohen's recent testimony before Senator Ribicoff's hearings on health care costs he stated that increases in efficiency could result from the organization of group practice. It was also recommended that federal funds be made available for demonstration grants and promotional activities; loans to newly organized groups; and incentive payments through federal medical care programs to high quality group practices.

In spite of these recommendations, there still seems to be a need for more reliable data regarding the effects of group practice on cost and quality of medical care. In much of the material that has been written about group practice one sees definite opinions stated either for or against but very little data offered to support the arguments.

The debate and arguments will continue on this subject and the private practitioner will have to try to keep himself informed. In addition, he will have to participate and make his views known in his medical society. It is only through his participation in his medical society that he can hope to have any influence on the form that medical practice will take during these coming months and years.

WALTER S. COE, M.D.

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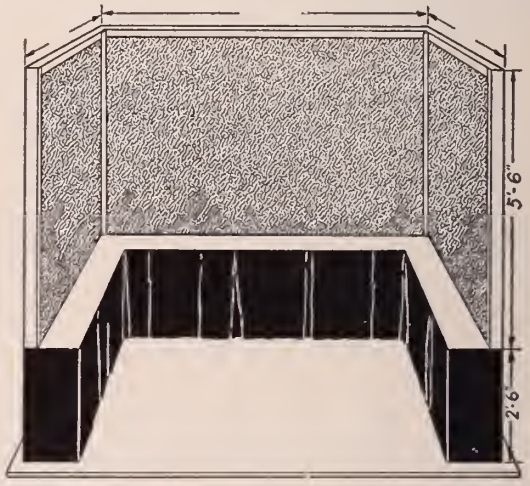
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The Kentucky Medical Association will provide without cost to the exhibitor the following: Exhibit space, shelves, sign for booth, current, bracket lights, provided all items are approved in advance by the committee.

Cost of transporting exhibits to the meeting must be borne by the individual exhibitor as well as costs of cards, signs, etc., which are a part of the exhibit.

View boxes, furniture, decorations, etc., may be rented, if desired, by applying directly to Jos. T. Griffin Company, 704 West Main Street, Louisville 2, who supply equipment for the annual KMA meeting.

Due to the shortage of space, please have your exhibit as compact as possible.

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ORGANIZATION SECTION

"Emergency Medical Care" Color TV Panel Discussion and Speeches To Be Highlight of Annual Meeting Scientific Program Sept. 25

Highlighting the scientific program of the 1968 KMA Annual Meeting will be a complete session devoted to the topic of "Emergency Medical Care" including a color TV presentation, panel discussion and speeches by three guest physicians, according to George F. Brockman, M.D., Greenville, KMA president.



Doctor Joseph



Doctor Freeark

Scheduled at 2 p.m., September 25 at Convention Center, Louisville, the session will open with a color TV presentation and panel discussion moderated by William T. Rumage, Jr., M.D., Louisville, chairman of the KMA Disaster Medical Care Committee.

Following the discussion, Donald Joseph, M.D., Columbia, Mo., will speak on "The Airway in an Emergency," Priscilla A. White, M.D., Boston, Mass., will discuss "The Unusual Diabetic," and Robert J. Freeark, M.D., Chicago, Ill., will talk about "The Management of Critical Injuries."

Scientific sessions on the topics of "Respiratory Diseases," "Office Examinations" and "Human Sexuality" have also been planned during the KMA Annual Meeting September 24-26. The program will also feature meetings of the KMA House of Delegates and the Woman's Auxiliary to KMA, an Orientation Program for new KMA members, scientific and technical exhibits, meetings of 16 specialty groups and the annual President's Luncheon.

Doctor Joseph, guest of the Kentucky EEN&T Society, graduated from St. Louis University School of Medicine in 1946 and completed his internship and residency training in St. Louis hospitals. He is an associate clinical professor at the University of Missouri, a diplomate of the American Board of Otolaryngology, a fellow of the American College of Surgeons and past president of the Society of Military Otolaryngologists.

Doctor White will be the guest of the Kentucky Chapter, American College of Physicians. Biographical information about Doctor White will appear in a future issue.

Guest of the Kentucky Chapter, American College of Surgeons, Doctor Freeark is director of the division of surgery of Cook County Hospital. He is a 1952 graduate of Northwestern University Medical School where he is now a professor of surgery. He is an assistant professor of surgery and oncology at Loyola University School of Dentistry and the author of numerous scientific articles and movies. Doctor Freeark is a recipient of the "Chicago's Ten Outstanding Young Men" award in medicine.

President's Luncheon To Feature Oklahoma's Lt. Governor Nigh

George Nigh, Lt. Governor of Oklahoma, will give an entertaining presentation entitled "It's A Fast, Fast World" at the President's Luncheon, September 25, during the 1968 KMA Annual Meeting in Louisville. The Luncheon will begin at 11:50 a.m. in the Flag Room of the Kentucky Hotel, according to George F. Brockman, M.D., Greenville, KMA president.



Now serving his second term as Oklahoma's Lt. Governor, George Nigh also served as that state's Governor in 1963, filling an unexpired term. When elected to his first term as Lt. Governor in 1958, he was the youngest man to hold that office in Oklahoma's history. At age 22 he was elected the youngest member of his state's House of Representatives where he served eight years.

Through his extensive travels across the United States as an after dinner speaker, Lt. Gov. Nigh has earned the title of "Oklahoma's new Will Rogers." A teacher by profession, he has taught history, gov-

ernment and political science at secondary and college levels.

Lt. Gov. Nigh is a former state officer in the Junior Chamber of Commerce and has received three Distinguished Service Awards in his home town of McAlester, Oklahoma.

Preliminary Program Released For KMA Annual Meeting

KMA President George F. Brockman, M.D., Greenville, released the following preliminary scientific program for the 1968 KMA Annual Meeting, September 24-26, at press time. During each morning and afternoon session of the three-day meeting, which will be held at Convention Center, Louisville, provision will be made for time to visit the scientific and technical exhibits.

Tuesday, September 24

Morning Session

Jerold Lucey, M.D., Burlington, Vt.—*"Recent Advances in the Care of Newborn Infants"*

Sidney Olansky, M.D., Atlanta, Ga.—*"Syphillis Management*, 1968"

President's Address

Color TV—*"Respiratory Diseases"*—Peter Bosomworth, M.D., Lexington, Moderator—John Hedley-Whyte, M.D., Boston, Mass., panelist. Others to be selected.

Afternoon Session

There will be no general scientific session at this time in order that nine of the 16 participating specialty groups may hold their meetings.

Wednesday, September 25

Morning Session

Color TV—*"Office Examinations"*—Fred Rainey, M.D., Elizabethtown, Moderator—William S. Smith, M.D., Ann Arbor, Mich. and Shelvin Rovin, D.D.S., Lexington, panelists. Others to be selected.

Keith Waterhouse, M.D., Brooklyn, N.Y. (*Topic to be announced*)

Edward M. Kline, M.D., New York, N.Y. (*Topic to be announced*)

Noble Fowler, M.D., Cincinnati, Ohio (*Topic to be announced*)

Presentation of Scientific Exhibit Award

Afternoon Session

Color TV—*"Emergency Medical Care"*—William T. Rumage, Jr., M.D., Louisville, Moderator. Panelists to be selected.

Donald Joseph, M.D., Columbia, Mo.—*"The Airway in an Emergency"*

Priscilla A. White, M.D., Boston, Mass.—*"The Unusual Diabetic"*

Robert J. Freeark, M.D., Chicago, Ill.—*"The Management of Critical Injuries"*

Thursday, September 26

Morning Session

"Human Sexuality"

Karl Olsen, M.D., Cleveland, Ohio (*Topic to be announced*)

William M. Sheppe, Jr., M.D., Charlottesville, Va. —*"Sexual Problems in Family Practice"*

Third participant to be announced

Color TV—*"Human Sexuality"*—Philip S. Crossen, M.D., Lexington, Moderator—Robert G. Heath, M.D., New Orleans, La., panelist. Others to be selected.

Afternoon Session

There will be no general scientific session at this time in order that the remaining seven participating specialty groups may hold their meetings.

Board of Trustees Names Mr. Cox Executive Secretary of KMA

The Board of Trustees of the Kentucky Medical Association appointed Robert G. Cox to serve as the organization's executive secretary April 17. Announcement of the appointment was made by George F. Brockman, M.D., Greenville, KMA president.



Mr. Cox

Mr. Cox succeeds KMA's first executive secretary, Joseph P. Sanford, who held that position from 1951 until his death March 25. As assistant executive secretary of KMA for the past three years, Mr. Cox worked closely with Mr. Sanford in performing administrative duties for the Association.

Following a tour of duty with the armed services during the Berlin crisis, Mr. Cox became affiliated with KMA in 1962. He previously served as executive vice president of the Kentucky Junior Chamber of Commerce. A native of Owensboro, he is married and has two children.

UK Dean Participates in Seminar

William S. Jordan, M.D., Lexington, dean of the University of Kentucky College of Medicine, participated in the first of a series of seminars for newly appointed deans of medical schools April 28-May 1 at Wilmington Island, Ga.

The seminars are sponsored by the Association of American Medical Colleges and designed to aid new deans in understanding the problems of medical school administration. Mrs. Jordan also participated in a seminar session conducted for the wives of the new deans.

Well-Attended Interim Meeting Termed Highly Successful

More than 200 KMA members, their wives and guests heard four stimulating addresses and an informative panel discussion during the 1968 Interim Meeting, April 17 and 18 at the White House Inn, Covington. Members and officers of the Association who attended the meeting said it was "a highly successful two-day session."

In addition to the outstanding presentation of the guest speakers, the Interim Meeting included meetings of the KMA Board of Trustees, Woman's Auxiliary, KEMPAC Board and an Orientation Program for new members.

The session opened April 17 with a panel discussion of the Ohio Valley Regional Medical Program moderated by James B. Holloway, Jr., M.D., Lexington. Participants included Stephen A. Ackerman, Bethesda, Md., associate director of planning and evaluation for the Heart, Cancer and Stroke Program; Victor A. Sholis, Louisville, president of WHAS, Inc.; and Walter I. Hume, Jr., M.D., Louisville.

(Continued on page 572)



Physicians at the speakers' table enjoy a humorous remark by Francis L. Land, M.D., (right) during his talk on "Title XIX in Kentucky" at the April 18 morning session of the KMA Interim Meeting. Pictured from left to right are Richard S. Wilbur, M.D., who discussed "Usual and Customary Fees—or Who Says It's Reasonable," Blair J. Henningsgaard, M.D., whose topic was physicians and politics, and KMA President George F. Brockman, M.D., who presided at the session.



Guest speakers at the 1968 KMA Interim Meeting April 18 in Covington chat with KMA officers during a brief intermission. Pictured from left to right are George F. Brockman, M.D., Greenville, KMA president; Francis L. Land, M.D., Washington, D.C., Commissioner of the Medical Services Administration in the Department of Health, Education and Welfare; Richard S. Wilbur, M.D., San Francisco, Calif., former chairman of California Blue Shield; Blair J. Henningsgaard, M.D., Astoria, Oregon, chairman of the AMPAC Board; and Henry B. Asman, M.D., Louisville, KMA president-elect.

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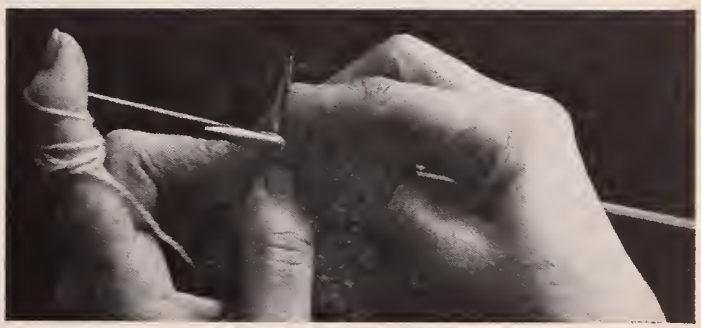
t don't forget this about Butazolidin alka

ntraindications: Edema; danger of cardiac compensation; history or symptoms of peptic er; renal, hepatic or cardiac damage; tory of drug allergy; history of blood dys- sia. The drug should not be given when the tient is senile or when other potent drugs are en concurrently. Large doses of Butazolidin a are contraindicated in glaucoma.

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ecautions: Before prescribing, carefully ect patients, avoiding those responsive to utine measures as well as contraindicated tients. Obtain a detailed history and a com- te physical and laboratory examination, cluding a blood count. The patient should not ceed recommended dosage, should be osely supervised and should be warned to scontinue the drug and report immediately ever, sore throat, or mouth lesions (symp- ms of blood dyscrasia); sudden weight gain ater retention); skin reactions; black or tarry ools or other evidence of intestinal hemor- age occur. Make complete blood counts at eekly intervals during early therapy and at week intervals thereafter. Discontinue the ug immediately and institute counter- easures if the white count changes signifi- ntly, granulocytes decrease, or immature rms appear. Use greater care in the elderly d in hypertensives.

lverse Reactions: The more common are usea and edema. Swelling of the ankles or ce may be minimized by withholding dietary lt, reduction in dosage or use of diuretics. In derly patients and in those with hypertension e drug should be discontinued with the pearance of edema. The drug has been sociated with peptic ulcer and may reac- tivate a latent peptic ulcer. The patient should be instructed to take doses immediately before or after meals or with milk to minimize gastric upset. Drug rash occasionally occurs. If it does, promptly discontinue the drug. Agranulocytosis, exfoliative dermatitis, Stevens-Johnson syndrome, Lyell's syndrome (toxic necrotizing epidermolysis), or a generalized allergic reaction similar to serum sickness may occur and require permanent withdrawal of medication. Agranulocytosis can occur suddenly in spite of regular, repeated normal white counts. Stomatitis, salivary gland enlargement, vomiting, vertigo and languor may occur. Leukemia and leukemoid reactions have been reported. While not definitely attributable to the drug, a causal relationship cannot be excluded. Thrombocytopenic purpura and aplastic anemia may occur. Confusional states, agitation, headache, blurred vision, optic neuritis and transient hearing loss have been reported, as have hyperglycemia, hepatitis, jaundice, hypersensitivity angiitis, pericarditis and several cases of anuria and hematuria. With long-term use, reversible thyroid hyperplasia may occur infrequently. Moderate lowering of the red cell count due to hemodilution may occur.



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(Continued from page 568)

A highlight of the meeting was the luncheon address by Philip R. Lee, M.D., Washington, D.C., recently appointed director of all federal health programs under the Department of Health, Education and Welfare. His topic was "Medicine in 1968."

The morning session April 18 included discussions by three prominent physicians of topics that have been of intense interest to KMA members recently. They included "Physicians and Politics" presented by Blair J. Henningsgaard, M.D., Astoria, Ore.; "Usual and Customary Fees" discussed by Richard S. Wilbur, M.D., San Francisco, Calif.; and "Title XIX in Kentucky" outlined by Francis L. Land, M.D., Washington, D.C.

Eight Students To Receive Loans From Medical Scholarship Fund

Loans for eight first-year medical students were approved by the Board of Trustees of the Rural Kentucky Medical Scholarship Fund at its May 16 annual meeting, according to C. C. Howard, M.D., Glasgow, Board chairman. The Board also approved renewal applications of 22 upper classmen, bringing the total amount of the loans to $60,500.

Four of the recipients have agreed to practice in "critical" counties under which plan one year's loan is waived for each year of such practice. They are Roger D. Akers and Stanley Gil Clemons, Lexington; Charles F. Arnett, Prestonsburg; and Herbert Cool, Jr., Sidney.

Students receiving regular first-year loans are Larry S. Atkinson, Falmouth; Ronald M. Johnson, Utica; Allen M. Jones, Louisville; and Marilyn Pack, River. These recipients may practice in over 90 counties and must repay their loans unless they decide at a later date to practice in "critical" counties.

William S. Jordan, Jr., M.D., dean of the University of Kentucky College of Medicine, and Henry S. Spalding, M.D., Bardstown, a member of the KMA Board, were elected to the Board of Trustees of the Fund. The Board appointed Tom F. Whayne, M.D., associate dean of the UK College of Medicine, a liaison officer and named KMA Executive Secretary Robert G. Cox secretary to the Fund.

Doctor Howard expressed the appreciation of the Board for the support and interest of Governor Louie B. Nunn, Health Commissioner Russell E. Teague, M.D., and the Kentucky General Assembly.

Mr. McConnell on NABSP Bd.

J. Ed McConnell, Louisville, president of Kentucky Blue Cross-Blue Shield, was elected to the Board of Directors of the National Association of Blue Shield Plans April 8, during the Association's annual meeting in San Francisco, Calif.

The NABSP board is responsible for coordinating the national activities of 76 Blue Shield Plans. Mr. McConnell became president of the Kentucky Plans in July, 1967.

Dr. Rulander To Head KAGP; Dr. Rainey Honored at Mtg.

The Kentucky Academy of General Practice named John G. Rulander, M.D., Louisville, its new president-elect and installed Elmer G. Prewitt, M.D., Corbin, president, during its Seventeenth Annual Assembly May 8-10 in Louisville.



Doctor Rainey



Doctor Rulander

The Academy presented its "Citizen-Doctor of the Year" award to Fred C. Rainey, M.D., Elizabethtown. Doctor Rainey is chairman for state affairs of the KMA Committee on Legislative Activities and worked diligently in that capacity during the 1968 Kentucky General Assembly.

Other officers elected at the meeting, presided over by Thornton E. Bryan, Jr., M.D., Cadiz, 1967-68 president, include Ben F. Roach, M.D., Midway, vice president; Charles G. Bryant, M.D., Louisville, secretary; and Harold D. Haller, Sr., M.D., Louisville, treasurer. Doctor Roach served as chairman of the Committee on Arrangements for the session.

The Academy also honored Mitchel B. Denham, M.D., Maysville, for his work as a state representative in the legislature, and Carroll L. Witten, M.D., Louisville, for a paper presented on adolescence.

Doctor Rulander has practiced in Louisville since his graduation from the University of Louisville School of Medicine in 1942. He is a founder member of KAGP and has served that organization as speaker of the House of Delegates from 1966 through 1968 and as chairman of the 1964 Scientific Assembly.

Three KMA Trustee Districts Hold Meetings in May

George F. Brockman, M.D., KMA president, was the featured speaker on the programs of the meetings of three KMA Trustee Districts in May. The Thirteenth District met May 14 in Ashland; the Fifteenth District held its meeting May 22 at Barbourville, and the Fourteenth District met May 23 at Pikeville.

Trustees for the three districts are Walter L. Cawood, M.D., Ashland; E. C. Seeley, M.D., London; and Ballard W. Cassady, M.D., Pikeville, respectively.

Participating in the scientific program preceding the meeting of the Fifteenth District were Joseph

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R. Dorchak, M.D., Lexington, and Frank Turney, M.D., Knoxville, Tenn.

The Fourteenth District also presented a scientific program preceding their meeting. Participants were Ralph M. Denham, M.D., John A. Hemmer, M.D., and Paul J. Ross, M.D., all of Louisville.

In Memoriam

DANIEL W. FORTUNE, M.D.
Olive Hill
1886-1968

Daniel W. Fortune, M.D., 83, an Olive Hill physician for 60 years, died April 4 at his home after a long illness. Doctor Fortune graduated from the National University of Arts and Sciences Medical Department, St. Louis, in 1918.

WILLIAM O. LASLEY, M.D.
Allensville
1890-1968

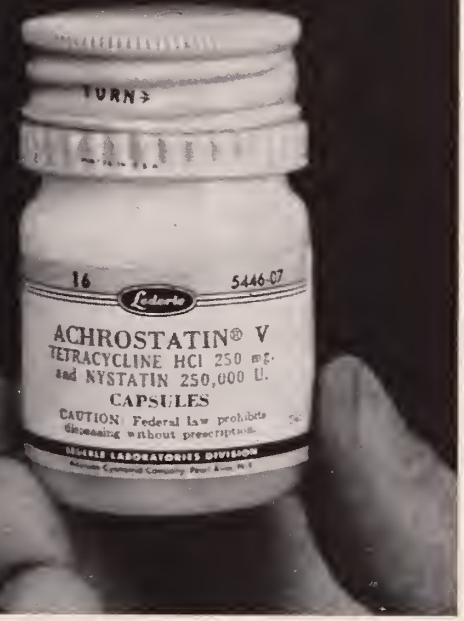
William O. Lasley, 77, a retired physician, died April 21 at his home in Allensville following a long illness. Doctor Lasley graduated from the Chicago Medical School in 1930 and practiced in Chicago until his retirement.

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Digest of Board of Trustees Minutes

April 17, 1968

The meeting of the Board of Trustees opened with the adoption of a resolution relating to the death of Mr. J. P. Sanford, KMA executive secretary. This was followed by routine reports.

The Board then considered nominations to submit to the Governor for membership on the Hospital Licensure Council and the Advisory Council on Medical Assistance and made its selections.

A lengthy discussion was held on Title XIX in Kentucky and Resolution F, passed by the House of Delegates in September which pertained to the payment of usual and customary fees for services to patients both in and out-of-hospitals. A detailed explanation was made of all events that had taken place on this matter since last September, the current status, and projected plans of the Title XIX program. A motion was then passed to implement Resolution F by writing to the membership if a satisfactory solution was not obtained within two weeks.

The next action of the Board was to accept a report from the KEMPAC Board Chairman John C. Quertermous, M.D., and to defer action on the KMA Hospital Committee recommendations until August.

A resolution regarding KMA staff was approved and the Budget Committee presented its report for the proposed 1968-69 budget. Following an explanation that the Budget Committee and the Executive Committee had spent considerable time on this proposal and the fact that there were no radical changes being proposed, the new budget was adopted.

A report on the mumps vaccination program in Campbell County was accepted for information. Brief comments on AMA activities were made by AMA Trustee Robert C. Long, M.D. KMA President Brockman then reminded the trustees that they should submit recommendations on redistricting of trustee districts so that a plan could be formulated in July for presentation to the House of Delegates in September.

Appropriate action was taken on a request concerning the Fair Labor Standards Act and the KMA legal counsel was requested to publicize information on this subject through the medium of The Journal.

Fred C. Rainey, M.D., chairman of the Legislative Committee for State Affairs, presented a report on the 1968 Kentucky General Assembly, noting that 10 percent of the 1,200 bills introduced had medical implications. Following his comments, the Board approved a resolution expressing appreciation for all of those individuals who worked so



Vacation trip....

Motion sickness?

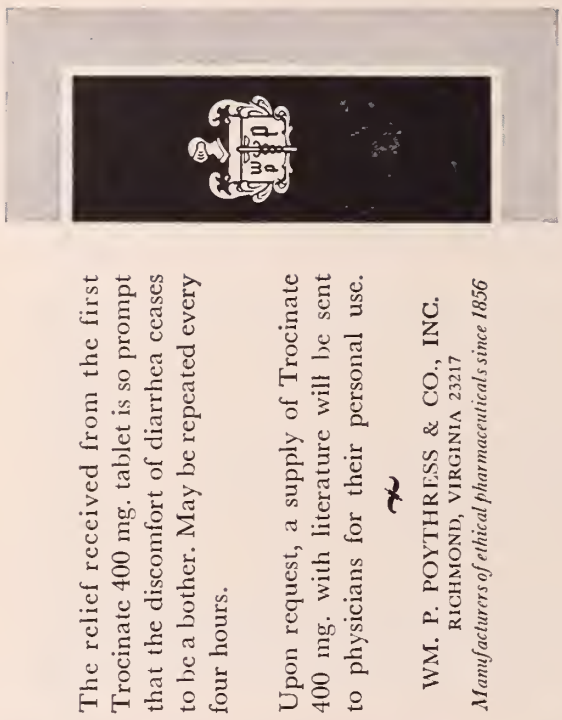


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diligently on legislative matters and further accepted for information similar resolutions passed by the Fayette County Medical Society.

A recommendation from the Health Career Committee was acted upon favorably which authorizes the members of the committee to investigate various methods of obtaining funds for the establishment of a Health Careers Council. Expression of appreciation was made to the Southeastern Surgical Congress for a contribution to the McDowell House, and changing the name of the KMA Journal to "Kentucky Medicine" was authorized.

Because he had dedicated his life and energies toward the betterment of Kentucky medicine, the Board approved a motion that the Headquarters Office building be named for Mr. J. P. Sanford and that a dedication ceremony be conducted during the 1968 KMA Annual Meeting. It was pointed out that the building became debt free on April 15.

Final action taken was to authorize the introduction of a resolution to the AMA House of Delegates in June protesting the use of the recently revised birth certificate. It was decided that the next meeting would be held on Wednesday and Thursday, August 7 and 8.

Golf Tournament Fans Urged To Mail Coupon Below

In deleting the golf committee under the KMA reorganizational structure last year, it was specified that if any future tournaments were held in conjunction with the KMA Annual Meeting, they would be administratively and financially the responsibility of the Kentucky Medical Golf Association. The KMGA is comprised of those individuals who pay dues for the privilege of playing in the golf tournament.

The 1967 Golf Committee Chairman, Donald L. Ware, M.D., Louisville, requests that all KMA members interested in continuing the golf tournament and willing to pay a reasonable fee to support the incurred expenses complete and mail the coupon below.

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Shigellosis

(Continued from page 548)

the complicated cases suggesting that associated disease provoked dysentery from a carrier state.

6. Bacteremia is rare but does occur.
7. Mortality is more common in small infants with associated diseases.
8. The cases with unusual manifestations are described and discussed.

References

1. Rosenstein, B. J.: Shigella and salmonella enteritis in infants and children. An Analysis of 692 cases. *Johns Hopkins Univ. Bull.* Johns Hopkins Hospital, 115/5:407-415, (May) 1964.
2. Fischler, E.: Convulsions as a complication of shigellosis in children. *Helv. Paediat. Acta.* 17:389-394, 1962.
3. Donald, W. D., Winkler, C. H., Bargeron, L. M.: The occurrence of convulsions in children with shigella gastroenteritis. *J. Pediat.* 48:323-329, (March) 1956
4. Sanyal, S. K., Hughes, W. T. and Falkner, F.: Shigellosis in infancy and childhood. *J. Pediat.* 62:784-785, (May) 1963.
5. Blalock, J. W. S., and Gutherie, K.: Study of acute ileocolitis (Dysentery) in children. *J. Path. & Bact.* 45:79-95, (July) 1937.
6. Felsen, J., Rundlette, G., Sullivan, J., and Gorenberg, H.: Atypical flexner epidemic. *JAMA.* 103: 1055-1058, (October) 1934.
7. Cordle, F. and Boltjes, B. H.: The isolation of Shigella flexneri from blood cultures in acute shigellosis. *J. S. Carolina Med. Assn.,* 59:278-279, (August) 1963.
8. Barrett-Connor, E.: Shigellosis in the adult. *JAMA.* 198:717-720 (November) 1966.
9. Dubos, R. J. and Hirsch, J. G.: *Bacterial and mycotic infections of man. 4th edi.* J. B. Lippincott Co., 1965 (Philadelphia).
10. Milton, F.: Epidemic shigella gastroenteritis in endemic area. II. age specific clinical aspects. *Ped.* 11:145-152 (February) 1953.
11. Poh, S.: Shigellosis: a clue to early diagnosis. *Ped.* 39:119-120 (January), 1967.
12. Breed, R. S., Murray, E. G. D. and Smith, N. R.: *Bergey's Manual of Determinative Bacteriology. 7th ed.* Williams and Wilkins, 1957.
13. Stuart, C. A., Rustigian, R., Zimmerman, A., and Corrigan, F. V.: Pathogenecity, antigenic relationships and evolutionary trends of Shigella alkalescens. *J. Immun.* 47:425-437 (November) 1943.
14. Felsen, J.: Pneumonic type of bacillary dysentery. *New York J. Med.,* 37:253-254 (February), 1937.
15. Raffensperger, E. C.: Combined bacillary and amebic ulcerative colitis associated with atypical pneumonitis and shigella positive sputum. *Amer. J. Med.,* 20:964-965 (June), 1956.
16. Noer, H. R.: An "experimental" Epidemic of Reiter's Syndrome. *JAMA* 197:693-698 (November), 1966.
17. Margileth, A. M.: Reiter's Syndrome in children: case report & review of literature. *Clin. Pediat.,* 1:148-151 (December) 1962.
18. Dodd, K. and Swanson, H.: Dysenteric bacteremia and report of 3 cases. *Am. J. Dis. Child.* 56:1082-1085 (November), 1938.
19. Cooke, R. T.: Fulminating Sonnei Dysentery. *Brit. M. J.* 2:151-152 (August), 1940.
20. Hardy, A. V. and Watt, J.: Studies of acute diarrheal diseases. XIV. clinical observations. *Pub. Health Rep.,* 60:521-531 (May), 1945.
21. Formal, S. B., LaBrec, E. H. and Schneifer, H.: Pathogenesis of bacillary dysentery in laboratory animals. *Fed. Proc.* 24:29-34 (January-February), 1965.
22. Winter, B. V. and Harding, H. B.: Shigella sonnei bacteremia. Case report and review of literature. *JAMA,* 180:927-931 (June) 1962.
23. Tatham, P., Pearse, W., and Steward, G. T.: Bacillemia due to Shigella Sonnei. *Lancet.* 1:997-998 (May), 1951.
24. Watt and Hardy: Studies of the Acute Diarrheal Diseases. *Public Health Rep.* 60:261-273 (March), 1945.
25. Rossi, J. P. and Brandt, I. K.: Transient granulocytopenia of newborn associated with sepsis due to Shigella alkalescens and maternal leukocyte agglutinins. *J. Pediat.* 36:639-647 (May), 1960.

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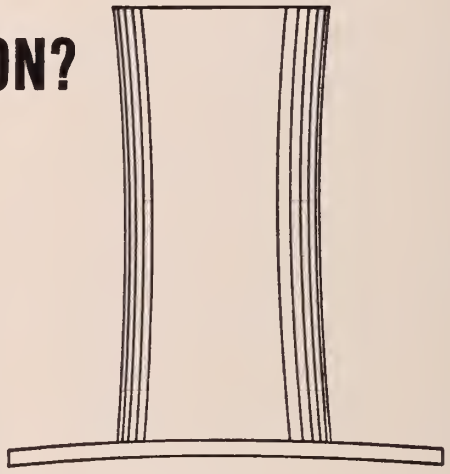
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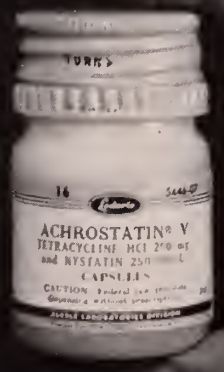
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(Continued from page 539)

18. Kauffman, H. M., Fisher, L. M., and Hume, D. M.: *Kidney Transplantation in Surgical Bleeding;* Handbook for Medicine, Surgery and Subspecialties. Ulin, A. W. and Golub, S. S., Eds., McGraw-Hill, New York, 1966.
19. Hume, D. M., Magee, J. H., Prout, G. R., Kauffman, H. M., Cleveland, R. H., Bower, J. D., and Lee, H. M.: Studies of Renal Homotransplantation in Man. *nn. N. Y. Acad. Sci.* 120:578, 1964.
20. Prout, G. R., Hume, D. M., Lee, H. M., and Williams, G. M.: Some Urological Aspects of 93 Consecutive Renal Homotransplants in Modified Recipients. *J. Urol.* 97:409, 1967.
21. Robertshaw, G. E., Madge, G. E., and Kauffman, H. M.: Ureteral Pathology in Treated and Untreated Renal Homografts. *Surg. Forum,* 17:236, 1966.
22. McIntosh, D. A., Peterson, E. W., and McPhaul, J. J.: Autonomy of Parathyroid Function After Renal Homotransplantation. *Ann. Int. Med.* 65:900, 1966.



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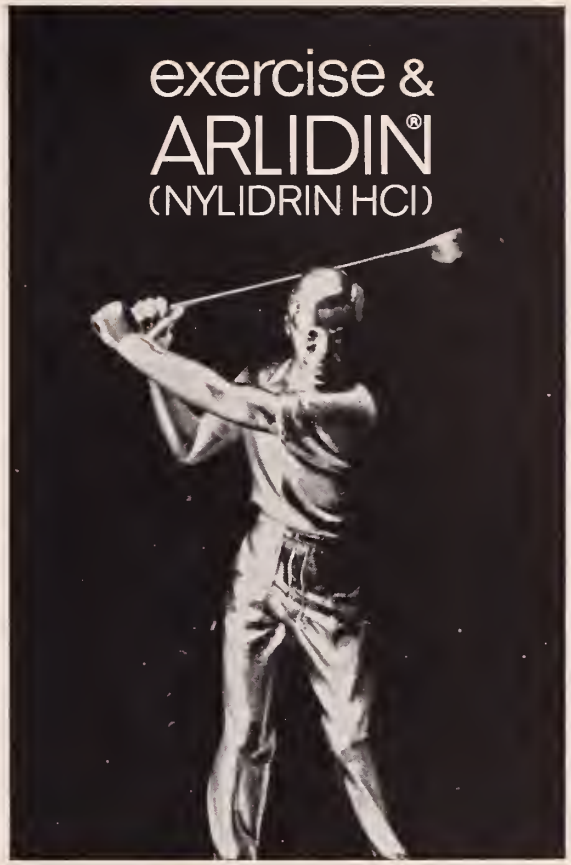
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24-26 KMA ANNUAL MEETING, Convention Center and Kentucky Hotel, Louisville

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JUNE

13-17 American College of Chest Physicians, Hilton Hotel, San Francisco, Calif.

16 AMA Committee on Medicine and Religion, "Limits of Medical Responsibility in the Prolongation of Life," California Masonic Temple, San Francisco, Calif.

16 American College of Legal Medicine, Clinical Meeting, 2-5 p.m., San Francisco Hilton Hotel, San Francisco, Calif.

16-20 American Medical Association 117th Annual Convention, Brooks Hall, San Francisco, Calif.

18-19 American Medical Women's Association Interim Meeting, Waldorf Astoria Hotel, New York, New York

21-22 Medical Writing and Journalism Course, American Medical Writers Association, San Francisco Medical Center, San Francisco, Calif.

SEPTEMBER

9-11 American EEG Society continuation course in Clinical Electroencephalography, San Francisco, Calif.

NOVEMBER

11-15 American Public Health Association Annual Meeting, Cobo Hall, Detroit, Mich.

18-21 Southern Medical Association Annual Meeting, New Orleans, La.

SEND IN MEETING INFORMATION

Many medical organizations are setting dates for their fall and winter meetings. At the same time they are choosing the topics to be discussed, arranging for speakers and planning programs.

The Continuing Medical Education office of the Kentucky Medical Association would like to urge these societies and organizations to notify this office of these dates and topics so they can be added to the "Continuing Education Opportunities" calendar in *The Journal*. In this way conflicts in dates can be avoided and a wider audience can be informed of these upcoming meetings.

Please send such information, when available, to the KMA Continuing Medical Education Office, 3532 Janet Avenue, Louisville, Ky. 40205.

MEDICAL SCHOOL NEWS AND VIEWS

The Kentucky Student Looks at Medical Education†

Part Two

RICHARD WATKINS*

LAST month's article in this space described the pressures toward change which characterize medical education today. What is the experience of the students who, aware of this air of tension and innovation, come to the University of Kentucky Medical School because they hope that a young school will be less bound by tradition than others, and because they have heard of U.K.'s efforts to renovate the curriculum?

The University medical school is far from utopian, but at least some of the students' hopes are realized. The school *is* young, and its faculty tends to be young. While the school may have lost its chance for "instant fame" with the departure of some of its best-known professors to deanships and chairmanships elsewhere, this upward exodus may be a healthy sign; and the influx of new faculty helps to keep Kentucky flexible.

Curriculum changes which the Kentucky student appreciates include the shortened study of anatomy from prosected specimens in place of long hours of cadaver dissection. Another welcome change has been in the grading system. Grades in individual courses and exams have been replaced by a simple "pass" or "fail" designation. This system makes the tedious custom of scrapping for grades obsolete, freeing the student to enjoy his studies and pursue the direction dictated by his interest rather than by the necessity of competing for a grade. Replacement of multiple departmental exams in some courses by National Board exams similarly frees the student from the tyranny of the lecture-and-exam system. The presence of a Behavioral Science Department and a Department of Community Medicine helps to fill a widely acknowledged gap in most medical curricula: the emotional and socio-economic aspects of human disease. The Community Medicine program presents students with an opportunity for overseas study and research which is without equal in the country. (During this past year the students of Western Reserve sent a committee to study Kentucky's community medicine program). And finally, the educational lock-step of medical students is being broken up at the University—the student can spend much of his senior year in the elective emphasis of his choice, ranging from community medicine, to surgery, to laboratory research.

All the adjustments of curriculum however, do not flow unilaterally from the hand of the faculty. While the students have not been as extreme as have Harvard students, where 25 sophomores requested to handle their own studies entirely this past year, Kentucky students have innovations of their own. On an $800 per year school budget, the students maintain a curriculum evaluation committee. At the end of each course the committee submits an extensive questionnaire to the students, tabulates, summarizes, and sends recommendations to a surprisingly attentive faculty.

In order to alleviate the absence of clinical considerations during the pre-clinical years, the students have devised "underclassman rounds". Under this program an upperclassman meets with a freshman and a sophomore on the wards, where the upperclassman presents a patient who exemplifies a given disease. The sophomore then presents the pathologic aspects of the disease, and the freshman, the anatomic or physiologic aspects. The students also maintain a monthly newsletter, received by all the students and 100 faculty members. Among other functions, the newsletter is intended to serve as a forum for the intramural discussion of curricular policy.

Efforts of the sort outlined above have kept Kentucky lean and well-known in medical education. But the inertia which threatens every institution threatens Kentucky, and inactivity could make Kentucky another sclerotic, unimaginative institution—furtively looking to others to take the lead. Hopefully, through their continued efforts, Kentucky students and faculty will prevent inactivity from robbing them of their reputation. Certainly it is only through research, open discussion, and careful experimentation that we can arrive at arrangements in medical education more satisfactory than the present ones.

†*The second article in a two-part discussion of innovation in medical education. See May issue for Part One.*

**Sophomore, University of Kentucky College of Medicine*

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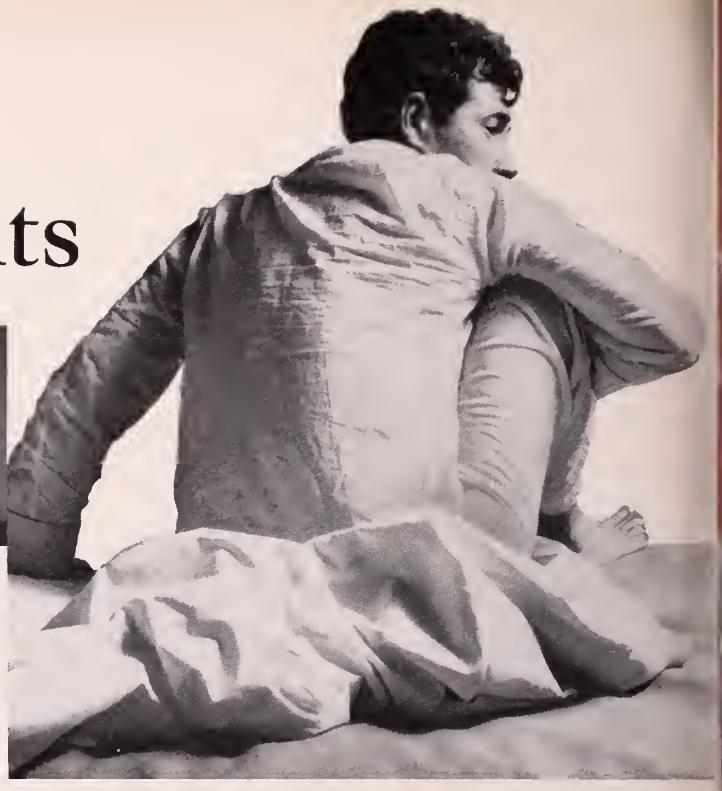
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Indications: Tension and anxiety states; somatic complaints which are concomitants of emotional factors; psychoneurotic states manifested by tension, anxiety, apprehension, fatigue, depressive symptoms or agitation; acute agitation, tremor, delirium tremens and hallucinosis due to acute alcohol withdrawal; adjunctively in: skeletal muscle spasm due to reflex spasm to local pathology, spasticity caused by upper motor neuron disorders; athetosis, stiff-man syndrome, convulsive disorders (not for sole therapy).

Contraindications: Known hypersensitivity to drug; children under 6 months of age; acute narrow angle glaucoma; may be used in patients with open angle glaucoma who are receiving appropriate therapy.

Warnings: Not of value in treatment of psychotic patients, and should not be employed in lieu of appropriate treatment. As with most CNS-acting drugs, caution patients against hazardous occupations requiring complete mental alertness (*e.g.*, operating machinery, driving). When used adjunctively in convulsive disorders, possibility of increase in frequency and/or severity of grand mal seizures may require increase in dosage of standard anticonvulsant medication; abrupt withdrawal in such cases may also be associated with temporary increase in frequency and/or severity of seizures. Advise patients against simultaneous ingestion of alcohol and other CNS depressants. Withdrawal symptoms (similar to those with barbiturates and alcohol) have occurred following abrupt discontinuance. Keep addiction-prone individuals (such as drug addicts or alcoholics) under careful surveillance because of their predisposition to habituation and dependence. Use of any drug in pregnancy, lactation or in women of childbearing age requires that potential benefit be weighed against possible hazard.

Precautions: If combined with other psychotropics or anticonvulsants, carefully consider individual pharmacologic effects—particularly with known compounds which may potentiate action of Valium (diazepam), such as phenothiazines, narcotics, barbiturates, MAO inhibitors and other antidepressants. Employ usual precautions in the severely depressed or in those with latent depression; suicidal tendencies may be present and protective measures necessary. Observe usual precautions in impaired renal or hepatic function. Limit dosage to smallest effective amount in elderly and debilitated to preclude ataxia or oversedation (initially 2 to 2½ mg once or twice daily, increasing gradually as needed or tolerated).

Adverse Reactions: Side effects most commonly reported: drowsiness, fatigue and ataxia. Infrequently encountered: confusion, constipation, depression, diplopia, dysarthria, headache, hypotension, incontinence, jaundice, changes in libido, nausea, changes in salivation, skin rash, slurred speech, tremor, urinary retention, vertigo and blurred vision. Paradoxical reactions such as acute hyperexcited states, anxiety, hallucinations, increased muscle spasticity, insomnia, rage, sleep disturbances and stimulation have been reported; should these occur, use of the drug should be discontinued. Because of isolated reports of neutropenia and jaundice, periodic blood counts and liver function tests are advisable during long-term therapy. Minor changes in EEG patterns (low-voltage fast activity) observed during and after therapy and are of no known significance.

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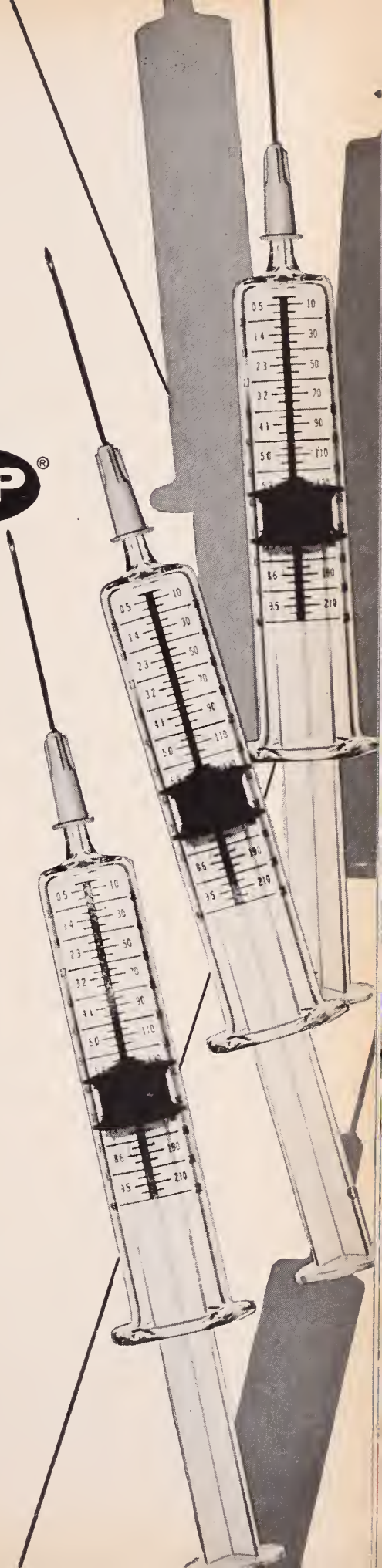
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JOURNAL of the KENTUCKY MEDICAL ASSOCIATION

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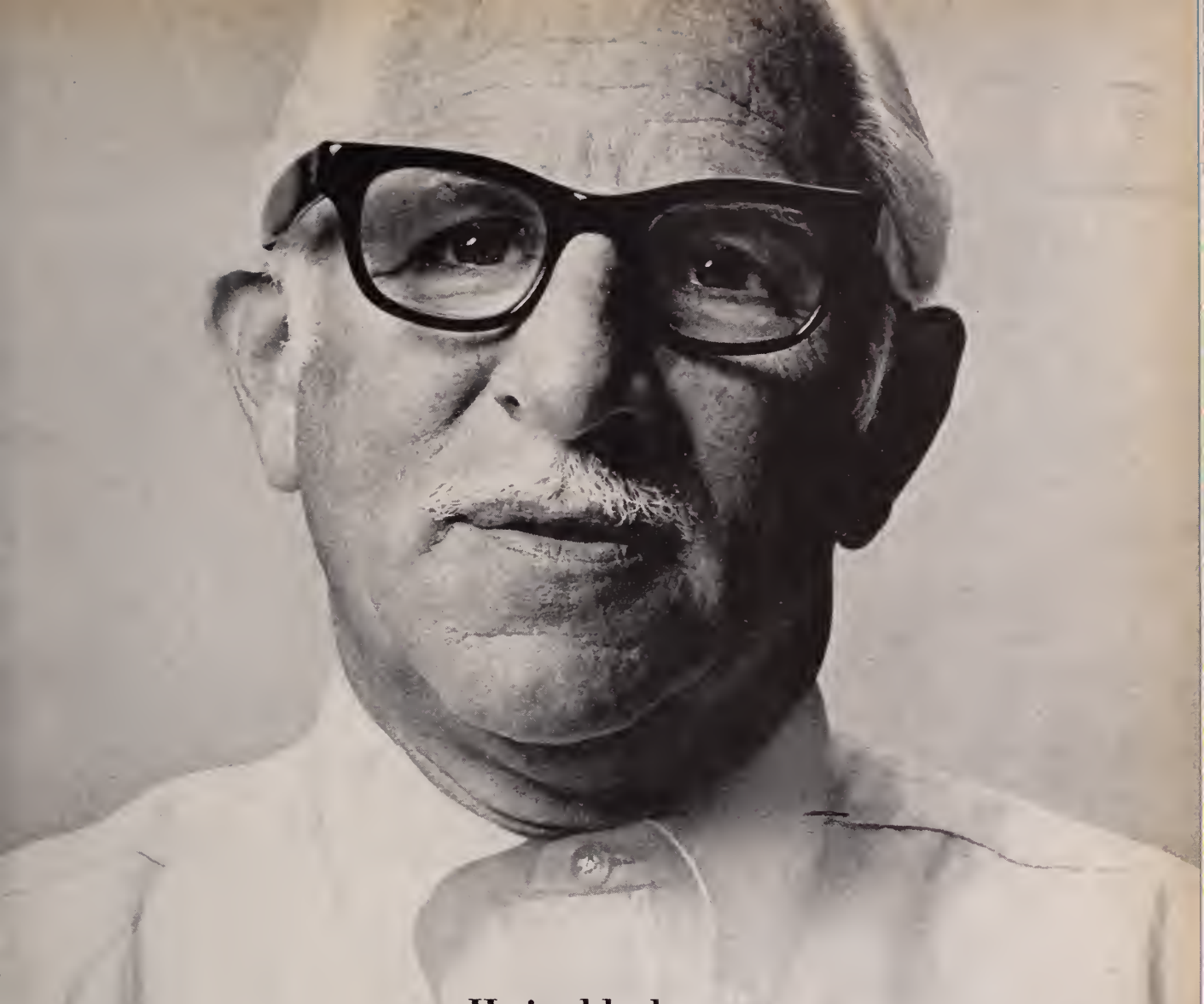
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He is elderly, he is on corticosteroids, when he needs an antibiotic he may be a candidate for

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rning: In renal impairment, usual doses may lead to excessive accumu-
on and liver toxicity. Under such conditions, lower than usual doses
indicated, and, if therapy is prolonged, serum level determinations
y be advisable. A photodynamic reaction to natural or artificial sun-
ht has been observed. Small amounts of drug and short exposure may
duce an exaggerated sunburn reaction which may range from ery-
na to severe skin manifestations. In a smaller proportion, photo-
rgic reactions have been reported. Patients should avoid direct
osure to sunlight and discontinue drug at the first evidence of skin
omfort. Necessary subsequent courses of treatment with tetracy-
es should be carefully observed.

cautions: Overgrowth of nonsusceptible organisms may occur. Con-
stant observation is essential. If new infections appear, appropriate measures should be taken.

In infants, increased intracranial pressure with bulging fontanels has been observed. All signs and symptoms have disappeared rapidly upon cessation of treatment.

Side Effects: Gastrointestinal system—anorexia, nausea, vomiting, diarrhea, stomatitis, glossitis, enterocolitis, pruritus ani. Skin—maculopapular and erythematous rashes; a rare case of exfoliative dermatitis has been reported. Photosensitivity; onycholysis and discoloration of the nails (rare). Kidney—rise in BUN, apparently dose related. Transient increase in urinary output, sometimes accompanied by thirst (rare). Hypersensitivity reactions—urticaria, angioneurotic edema, anaphylaxis. Teeth—dental staining (yellow-brown) in children of mothers given this drug during the latter half of pregnancy, and in children given the drug during the neonatal period, infancy and early childhood. Enamel hypoplasia has been seen in a few children. If adverse reaction or idiosyncrasy occurs, discontinue medication and institute appropriate therapy.

Average Adult Daily Dosage: 150 mg q.i.d. or 300 mg b.i.d. Should be given 1 hour before or 2 hours after meals, since absorption is impaired by the concomitant administration of high calcium content drugs, foods and some dairy products. Treatment of streptococcal infections should continue for 10 days, even though symptoms have subsided.

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MESSAGE FROM THE PRESIDENT



The Gross National Medical Product
Stretching a Tight Rope Tighter

PRODUCTION, in the sense of being a steady output of quality medical care, has been much discussed and reported on of late. To our surprise and edification, the Department of Health, Education, and Welfare (always a major discusser and reporter) states that the increase in production by physicians has more than offset the rise in fees. All of this is well and good since production is the graven image of the affluent.

It is obvious that an increase in this rate of production is a goal that is useful and desirable to society as a whole. It is just as obvious that there are limits to a rapid increase in the numbers of physicians. Too, there are limits to the number of perplexities each physician can juggle at any given time.

Alternatives do exist and several have been proposed. Many, such as the computerization of the physical profile and treatment of everybody, will have to await the arrival of some future Greater Society. But some of them commend themselves to our attention now.

The judicious use of individually trained assistants holds great promise in the changing atmosphere of modern practice. A ready source of these assistant-doctors exists in the registered nurses. Several former medical corpsmen have shown great worth in the field also. If such assistants are trained by physicians and their capabilities developed to meet individual needs, it appears that the results are more satisfactory than if they are mass-educated by a college. Public acceptance of medical assistants has already been proven in many instances.

It is difficult to think of anything more satisfying than to be able to practice the art of medicine in an office designed for it. Poor traffic patterns, outgrown spaces, inadequate room for use of new equipment, and inadequate parking all contribute to loss of time and lack of efficiency. Fortunately, the economy of our modern society lends itself quite readily to new construction. Perhaps it is time for many of us to take a hard, unsentimental look at the place we work.

LUTHER MARTIN WILSON, JR., M.D.
KMA VICE-PRESIDENT, WESTERN DISTRICT

**This is the fourth of a series of articles written at the request of KMA President George F. Brockman, M.D., by the three KMA vice-presidents and the president of the Woman's Auxiliary. The three previous articles appeared in the January, March and May issues of The Journal.*

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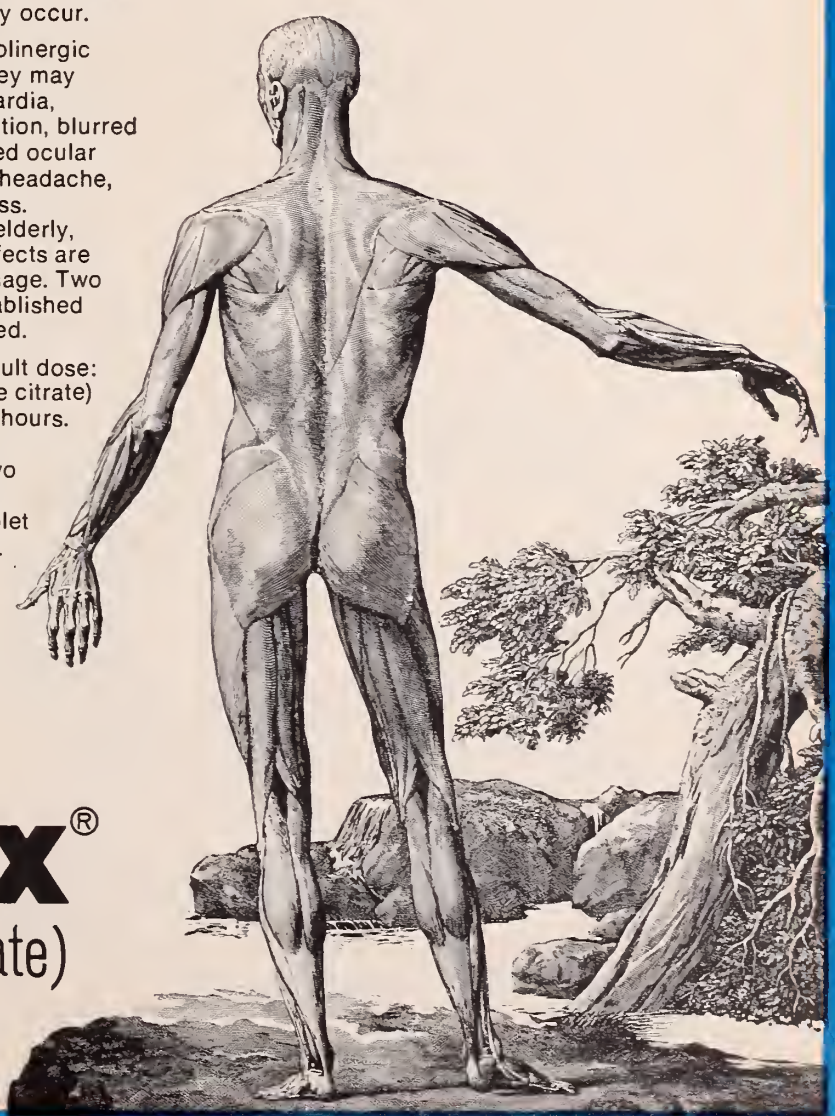
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DOSAGE: **INJECTABLE** — Average adult dose: one ampul, 2 cc. (60 mg. orphenadrine citrate) I.M. or I.V. May be repeated every 12 hours. Relief may be maintained with one NORFLEX tablet b.i.d. **TABLETS** — Two tablets per day for adults, one in the morning, one in the evening. Each tablet contains 100 mg. orphenadrine citrate.

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PUBLIC HEALTH PAGE

Professional Education Service†

Russell E. Teague, M.D., M.P.H.
Commissioner of Health
Commonwealth of Kentucky

THE Office of Chronic Disease, Kentucky State Department of Health, has undertaken a new service program. The program, which is endorsed by the Kentucky Medical Association Committee on Medical Education, is somewhat unique in several respects. It is designed to provide professional education service to the medical and dental professions and makes use of a method which has newly been added to the field of educational aids for all types of health personnel.

This method is the use of short "single-concept" teaching films in cartridge form. They are shown in the Mark IV Projector which projects on a TV-like screen. The cartridges hold film in a continuous loop, similar to that used in cartridge tape players, and are always ready for replay.

The objective of this program is to bring to practicing physicians, primarily in areas away from the university centers, an educational service at their convenience on subjects of their interest. A lending library of film cartridges is presently being established. Film samples and projectors will soon be on demonstration throughout the state. The program hopes to stimulate community hospitals to incorporate a Mark IV Projector in their libraries or physicians' lounges for use by the staff. Physicians will be able to obtain films from the lending library on short term loan. In addition, hospitals or physicians may want to obtain for themselves permanent copies of films used for training of laboratory, office or nursing personnel.

At present this service program is on demonstration in hospitals throughout the state. Physicians in Corbin, London, Henderson, Greenville, Whitesburg, Jenkins, Fulton, Murray, Hazard, Hopkinsville, Morehead, Russellville and Maysville have already viewed this demonstration and have generally had very favorable impressions. Hospital administrators and other hospital personnel have, as a rule, been impressed with the potential this program affords as a training and refresher aid. Tentatively scheduled for demonstrations soon are hospitals in Caldwell, Pulaski, Graves, Hardin, Ohio and Grayson counties. Physicians in these counties will receive an announcement prior to the demonstration.

In a panel meeting with American Medical Association representatives held at AMA Headquarters on December 8, 1964, Patrick B. Storey, M.D., director of the AMA's Department of Postgraduate Programs, cited the Vollan Survey, the AMA's analysis of the status of postgraduate medical education. In substance, the survey found that "too little was available and no design." Specific reasons why physicians did not participate in postgraduate programs included:

(a) no one is available to care for patients; physicians in solo practice have a difficult time getting away
(b) courses are offered at unsuitable times
(c) costs involved in being away are too great
(d) multiplicity of other meetings
(e) subject matter does not meet need
(f) lack of courses in nearby areas.

In rural Kentucky, where more than 60 percent of the state's three million population live and are cared for by less than 50 percent of the state's total physicians, the least pertinent of the cited reasons might be multiplicity of other meetings. An attempt to help meet some of the practical needs of postgraduate education is the basic purpose of this program.

The United States Public Health Service has awarded the State Department of Health a grant for initiating the cartridge film library program. Through the terms of the grant agreement, the subject matter of films purchased will be mostly on aspects of chronic disease—their detection, diagnosis, management and prevention. Initially most film subject matter will be on cancer and related diseases. However, other resources are being recruited to provide film sources on subjects in their area of interest so that every major medical and paramedical subject will eventually become available in cartridge form. Already the American Cancer Society, Kentucky Chapter, and the Offices of Tuberculosis Control, Dental Health and Maternal and Child Health, Kentucky State Department of Health have made

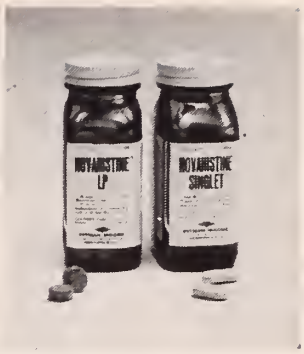
(*Continued on page 663*)

†*This article was prepared by: Donald F. Austin, M.D., Cancer Control Officer, Kentucky State Department of Health, 275 East Main Street, Frankfort, Kentucky 40601*

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THE INSURANCE PAGE



Senate Health Cost Hearings

THE first congressional study of medical costs is underway. Senator Abraham Ribicoff, chairman of the subcommittee, proposes to find out what has caused health costs to rise—as they have—out of proportion to other items on the Cost of Living Index.

It may not be totally irrelevant to note that Senator Ribicoff is running for re-election this year and the extra newspaper exposure involved in these hearings will be of much benefit to him.

The forthcoming study is expected to embrace all aspects of hospital and medical economics. The committee staff has taken great pains to assure representatives of professional groups that the hearings will be unbiased and that those conducting the study have no axes to grind. However that may be, Senator Ribicoff himself has set forth a number of guiding premises which sound more like accusations.

To begin with, it is alleged that mortality and morbidity rates in the United States leave much to be desired; that both the real and relative costs of medical care are increased out of all proportion to productivity of hospitals and physicians; that these charges are not constrained by competition and are largely free from consumer and government scrutiny; that to reimburse hospitals according to costs and doctors according to fees for services is to encourage overutilization; and that a much better job can be done in organizing the delivery of medical services in this country.

The committee can readily assemble statistics and witnesses to support each of these premises (or more accurately—conclusions). We hope, however, they will honestly take account of certain factors, which though politically unattractive, nevertheless contribute crucially to a basic understanding of the problem which the committee is trying to deal with.

Most of the admittedly impressive rise in health care costs has taken place since the advent of Medicare and Medicaid. These programs are paying for comprehensive medical services for a highly illness-prone segment of the population. Not only does the average member of these newly covered groups need and demand more medical services of all kinds than the population as a whole, but he also has fewer incentives to quit being a patient.

Thus a new range of services has been purchased for an enormous group of people who previously have been often unable to finance for themselves. At the same time, referring to physicians' services, the reimbursement program for Medicare has been based on the explicit condition that all services are to be charged and paid for according to the physician's usual fees for like service rendered to others, irrespective of the patient's income or financial resources.

Thus we have several major forces making for a sharp—but temporary—increase in medical costs. Vast new public funds are now devoted to the support of services previously largely unfunded; these services are being rendered for people who require an unusually large amount of medical care; these services are being paid for at a higher unit rate than was heretofore paid for them. And all this inflated demand has had to be absorbed by a profession whose manpower was already in short supply. Thus the Medicare Act is inevitably responsible for much of the inflation in our medical economy.

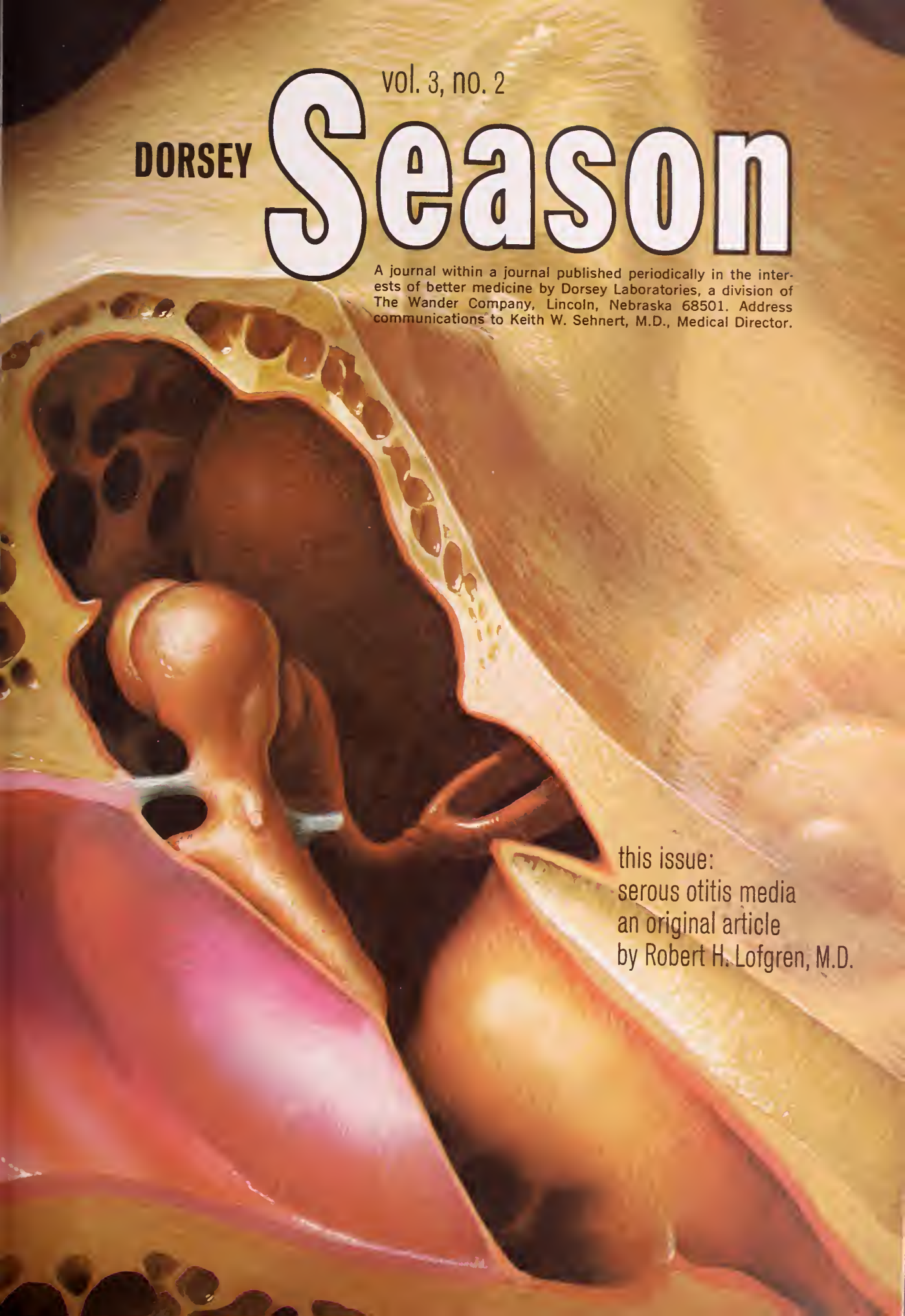
An objective and realistic study of the causes of this inflationary phenomenon—its nature and the possibilities of controlling it—would be an important contribution to the public welfare. This, however, may be too much to expect from Senator Ribicoff.

WILLIAM W. HALL, M.D.

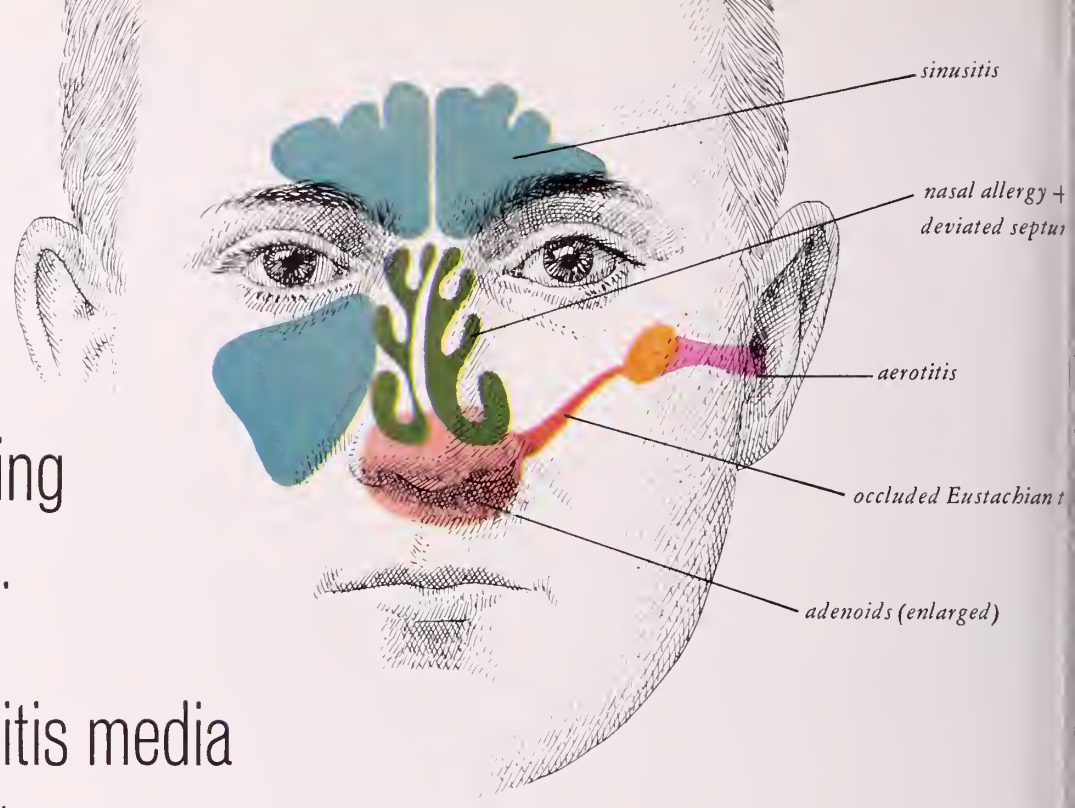
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this issue:
serous otitis media
an original article
by Robert H. Lofgren, M.D.



the complaining earache... key to serous otitis media

Robert H. Lofgren, M.D.
Associate Surgeon, Massachusetts Eye and Ear Infirmary, Boston, Massachusetts

Serous otitis media is probably the most common ear problem in children, especially in the wintertime. Diagnosis is usually easy in adults, but may be quite difficult in children, especially the very young child where one has to depend almost entirely on the physical findings.

The symptoms of serous otitis are a fullness in the ear, a mild hearing loss and mild earache. The earache can best be described as a "complaining earache" instead of a "screaming earache" as found in purulent otitis media. A young child may be irritable and pull at the ear. In milder cases, and as the ear recovers, gurgling and popping noises can be heard in the ear.

On examination one may see a yellow tympanic membrane and if a fluid level is present the diagnosis becomes easy. However, the eardrum may be dull gray, or slightly pink, or even perfectly normal. Pneumomassage using a Siegle otoscope or a closed-head electric otoscope must be done on both ears, otherwise the diagnosis will be frequently missed. Attempted movement of the drum with the pneumatic otoscope produces either a sluggish motion of the drum or no motion at all instead of the easily movable normal drum. The Rinne test is negative and there is a 15-20 decibel conductive hearing loss. The bone conduction may be better than normal and an air-bone gap may exist even with the air conduction within normal limits. Occasionally one finds a false nerve deafness on the audiogram when thick glue-like fluid causes immobility of both the oval and round window. Both conditions return to normal when the fluid is removed, but they make the interpretation of screening audiograms very difficult.

There is no single cause for serous otitis. One factor always present is blockage of the eustachian tube, but this alone is not enough to produce fluid. There must also be an inflammatory reaction. Blockage of the eustachian tube may be caused by many conditions. In children the most common cause is enlarged adenoids. In the summer the next most common cause is allergy. Upper respiratory infections or influenza are common causes in the winter. Nasal allergy, acute and chronic sinusitis, nasal septal deformity and cleft palate can all cause eustachian tube obstruction. Some children may have a congenitally small eustachian tube, but fortunately they usually "grow out of the problem."

The first sign of a nasopharyngeal tumor is often a serous otitis. One must always rule this out in any adult who later in life develops repeated or persisting serous otitis. Causes sometimes overlooked are nasogastric tubes after surgery, simple obesity and cardiorenal disease, which may produce congestion in the mucosal lining of the eustachian tube. In recent years we have been seeing a new cause—acute otitis media, where the patient is adequately treated with antibiotics but where drainage has not been

stablished either through the eardrum or down the ustachian tube. A sterile exudate is left in the middle ear.

he inflammatory response may be caused by a arked negative pressure as in air otitis from flying, it may be from a mild bacterial or viral infection the middle ear. Serous fluid is a good culture edium and will frequently go on to purulent otitis edia, especially if the original blockage was caused an infectious process such as acute rhinitis or denoiditis. When the infection heals there may be arring in the middle ear mucosa. Mucous glands velop in this tissue and pour out a thick mucoid aterial. This ear usually looks normal until a neumatic otoscope is used. The objectives in treatg serous otitis are to remove the obstructing agent d to provide drainage from the middle ear. Often is can be accomplished by decongestants and nose ops. If large obstructing adenoids are present they ould be removed. Sinusitis should be treated with al decongestants or nose drops, plus antibiotics here indicated. Nasopharyngeal tumors should be ated. Allergies should be treated with antihistaines and, where indicated, by desensitization.

the fluid does not clear with medical treatment ithin a week or two, a myringotomy should be one. If there is a question of active infection or if e fluid looks purulent, as is seen at the conclusion acute otitis, cultures are taken. On adults this can done in the office without anesthesia. It is no ore painful than an intravenous needle for a blood st. A good safe topical anesthetic has a tremenous psychological value to the patient. Children nder the age of 1 require no anesthesia. Between e ages of 1 and 3 anesthesia is not absolutely esntial although a general anesthetic may be used to void the child's possible mistrust at follow-up exminations. I usually do the myringotomy at the me time as the adenoidectomy if the adenoids are nlarged. Once drainage has been established with congestants or by myringotomy, positive pressure flation of the middle ear is invaluable in forcing t the serous fluid and keeping it from reforming. he patient can do this himself by performing the lsalva maneuver. This should be done several times a day, by taking a deep breath, holding the nose and blowing hard against the closed lips for a second or two.

In resistant cases where the fluid reforms as soon as the myringotomy heals, small polyethylene tubes are inserted through the myringotomy site. Insertion of the tubes, even in adults, usually requires an anesthetic. Good anesthesia can be obtained by infiltrating the canal wall with a local anesthetic, using a #27 needle. Once inserted the patient has no sensation of the tubes' presence. Be careful to caution the patient or parents not to allow any water to get into the ear canal while a myringotomy is open or a tube is in place. Water can be kept out by a pledget of lamb's wool in the ear canal or a cotton pledget thickly coated on the outside with petroleum jelly. I check these patients a week after a myringotomy to be sure it is healed and at two month intervals until the tubes have fallen out, usually within three to six months after insertion.

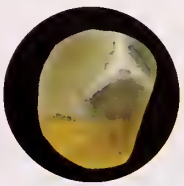
The mucoid type of fluid is so thick and tenacious that it is appropriately called a glue ear. It is aspirated only with difficulty through the eardrum, and occasionally must be removed through a tympanotomy. This thick, glue-like fluid is prone to recur, as the myringotomy usually heals long before the mucous membrane has returned to normal. Repeated myringotomies, as many as ten or twenty, were formerly required for this condition. Now polyethylene tubes are inserted initially when this thick, glue-like material is found. At times a subacute mastoiditis may accompany the serous otitis, which will necessitate a simple mastoidectomy before the condition can be eradicated. Usually the thin serous fluid readily responds to decongestants or to a myringotomy and removal of the eustachian tube obstruction. Occasionally, however, even serous fluid will repeatedly reform. For this, resection of the tympanic plexus of nerves which lies on the promontory of the middle ear has been carried out, as the tympanic branch of the glossopharyngeal nerve is the secretomotor nerve to the ear.

failure to diagnose serous otitis is the most common cause of the recurrent, almost continuous otitis me-

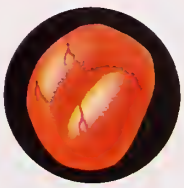
Otoscopic Views



Normal



Acute Serous



Acute Purulent



Chronic Serous

dia seen in young children. In these cases a myringotomy will frequently provide a long-term cure without adenoidectomy or any other surgery. Failure to do this may allow the condition to go on to acute or subacute mastoiditis. Adhesive otitis media with scar tissue binding down the ossicles or tympanosclerosis may also result with permanent impairment of hearing. The prognosis for hearing with adhesive otitis or tympanosclerosis is usually poor. If the adhesions are removed, they reform, and the same is frequently true of tympanosclerosis even after a tympanoplasty. For many of these people a hearing aid is the only solution. The constant negative pressure in long standing serous otitis media may draw in either Schrapnell's membrane or the posterior superior portion of the eardrum forming a pocket to cause a chronic otitis media with cholesteatoma, which may not become apparent until twenty or thirty years later.

The non-medical complications of improper diagnosis or treatment may be even more serious. The irritable child, the frequent bouts of acute purulent otitis media with pain and fever, the expense of antibiotics and doctors, and the time lost from school or work affect the entire family.

In summary, serous otitis has many causes. There is a blocking of the eustachian tube and an inflammatory reaction in the middle ear mucosa, the latter usually caused by a mild infection. The treatment is to provide immediate drainage by decongestants and where necessary, by a myringotomy. The obstructing agent must be removed by surgery if it is adenoid or by oral decongestants, and antihistamines or nasal spray if it is an upper respiratory infection or allergy. Occasionally resistant cases require plastic tubes placed through the eardrum or other more radical surgery. Failure to treat properly leads to hearing loss which may be permanent, repeated acute otitis media or possibly even chronic otitis media with cholesteatoma.

References 1. Senturia, B. H. et al.; Middle Ear Effusions: Pathologic Changes of the Mucoperiosteum in the Experimental Animal, Ann. Otol. 71:632-648, 1962. 2. Grahne, B.; Serous Otitis Media, Acta Oto-Laryng. 58:1-8, 1964. 3. Sade, J.; Pathology and Pathogenesis of Serous Otitis Media, Arch. Otolaryng, 84:297-305, 1966. 4. Buckingham, R. A. and Ferrer, J. L.; Reversibility of Chronic Adhesive Otitis Media with Polyethylene Tubes, Laryngoscope 76:993-1014, 1966. 5. Chalat, N. I. and Lounsbury, E.; A Hearing Phenomenon and Serous Otitis, Laryngoscope 76:983-992, 1966. 6. Shucknecht, H. F.; Chronic Otitis Media in Children: A New Treatment, Clin. Pediat. 3:718-727, 1964. 7. Feuerstein, S. S.; Surgery in Serous Otitis Media, Laryngoscope 76:686-708, 1966. 8. Kapur, Y. P.; Serous Otitis Media in Children, Arch. Otolaryng. 79:38-48, 1964. 9. Silverstein, H., Miller, G. F., Jr. and Lindemman, R. C.; Eustachian Tube Dysfunction as a Cause for Chronic Secretory Otitis in Children, Laryngoscope 76:259-273, 1966.



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Each teaspoonful (5 ml.) contains: phenylpropanolamine hydrochloride 12.5 mg.; pheniramine maleate 6.25 mg.; pyrilamine maleate 6.25 mg. Side effects: Drowsiness, blurred vision, cardiac palpitations, flushing, dizziness, nervousness or gastrointestinal upsets. Precautions: The possibility of drowsiness should be considered by patients engaged in mechanical operations requiring alertness. Use with caution in patients with hypertension, heart disease, diabetes or thyrotoxicosis. Dosage: Children 1-6, ½ tsp.; Children 6-12, 1 tsp.; Adults, 2 tsp. Administer every 4 hours. Supplied: Bottles of 4 fl. oz., pints.

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FACT & LEGEND



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BRIEF SUMMARY/**Indications:** Ambar suppresses appetite and helps offset emotional reactions to dieting. **Contraindications:** Hypersensitivity to barbiturates or sympathomimetics; patients with advanced renal or hepatic disease. **Precautions:** Administer with caution in the presence of cardiovascular disease or hypertension. **Side Effects:** Nervousness or excitement occasionally noted, but usually infrequent at recommended dosages. Slight drowsiness has been reported rarely. See package insert for further details.

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From the files of the

COMMITTEE FOR THE

STUDY OF MATERNAL MORTALITY

CASE 31-66. A 26 year old married white gravida 5 para 4 whose expected date of delivery was October 8, 1966 was admitted in labor at 7 a.m. on September 27, 1966. The membranes had ruptured spontaneously at home about 2:30 a.m., and the patient began having contractions at five-minute intervals at about 3 a.m. On admission, the blood pressure was 114/62, the fetal heart beat was of good quality, counted at rates varying between 160 and 190 per minute, and her temprature was 100°. She was given 1,200,000 units of long-acting Bicellin intramuscularly because of the fever, together with 5 mg Synkavite. Rectal examination showed the cervix to be 2-3 cm dilated, with the presenting part at station -3.

At 8:30 a.m. her pulse was 100, and her blood pressure 90/50. She was experiencing moderate contractions at five to six-minute intervals, lasting 30 to 40 seconds. At 9:30 a.m. her pulse was 96, her blood pressure was 110/70, and the fetal heart beat was counted at 172. On rectal examination the cervix was dilated to 3 to 4 cm, and the head was still at station -3. She was uncomfortable, and was given 50 mg Vistaril and 50 mg Demerol at 11:40 a.m. for discomfort. At 12:30 p.m. the cervix was 3 cm dilated, the station was -2, the fetal heat beat was of good quality at 160, the blood pressure was 100/60, and the pulse was 100. The patient's contractions were described as harder than before and she was observed to be passing thick meconium per vaginam. Her physician was notified of these findings. At 3 p.m. the cervix was 4 cm dilated, the head was at station -2, and the fetal heart beat was slow during a contraction, but sped up to 160 during the intervals between contractions. No forelying umbilical cord could be felt to account for the bradicardia. Nasal oxygen was started at 5 liters at 3:15 p.m., and an infusion of 1000 cc of 5% glucose in water was begun. At 4:40 p.m. she was having uterine contractions every one to two minutes, lasting 50 seconds. The blood pressure was 126/80, and the fetal heart beat was counted at 148. At 6 p.m. the contractions were recurring at one and one-half to two minute intervals, and the cervix was still 5 cm dilated when checked rectally. The fetal heart beat was not recorded after this. An x-ray was made of the abdomen and chest at 8:30 p.m., and from the film the diagnosis of a "macro-hydrocephalic infant" was made.

A surgical consultation was obtained. Because of the extremely hard contractions, it was felt the patient would best be delivered by cesarean section even though the infant was believed to be dead. She received 75 mg Demerol and 50 mg Vistaril at 9:10 p.m., and a cesarean section was performed. Before the uterus was opened it was obvious that the patient had sustained an occult uterine rupture in the area of the broad left ligament. The stillborn megalocephalic infant weighed 10 pounds four ounces. The tear in the uterus was closed and a tubal ligation was performed after the surgical incision in the uterus was closed in the conventional manner. The patient lost considerably more blood than usual during the section because the uterus did not contract; however, when additional oxytocics were given the uterus contracted and the abdomen was closed. After closure the uterus was again boggy and the blood pressure was "unstable". The pantient did not respond to the administration of two units of blood, which was the estimated blood loss at this time. The uterus would remain firm only as long as it was constantly massaged, during a period of 40 to 45 minutes.

Because of the patient's deteriorating condition resulting from the continued loss of blood from the boggy uterus, an emergency supravaginal hysterectomy was performed without anesthesia. Both ovaries and tubes were removed for technical reasons. It was observed that the sutures used to accomplish hemostasis of the cuff were not entirely successful, and there was also significant oozing from the anterior abdominal wall. A fibrin index was obtained at this time and the patient was found to be severely hypofibrinogenemic. Three units of whole fresh blood were given in rapid succession to correct this. The fibrin index returned to normal within approximately two hours, but oozing continued from her puncture sites and she remained in shock with a systolic blood pressure of 80 or below.

She received 1 gm fibrinogen and more blood to a total of 10 pints of which the last five were freshly drawn; Isuprel was also given. She also received 20 gm of calcium gluconate over a four-hour period and Solucortef intravenously at hourly intervals. In spite of these measures she died at 9:30 p.m. on October 27, 1966. There was no autopsy. The final diagnosis was occult uterine rupture due to prolonged labor and cephalopelvic disproportion due to a megalocephalic infant; amniotic fluid and meconium embolism; and hypofibrinogenemia.

Comments

The Committee classified this as a direct obstetrical death with possible preventable factors. Without an autopsy one cannot be positive of the diagnosis of

amniotic fluid and meconium embolism. She could well have had intra-abdominal bleeding. Hypofibrinogenemia was suspected and confirmed by the low fibrin index. It is equally helpful to tape a test-tube of blood to the bed and observe the clot regularly to make certain it does not lyse. If more fibrinogen had been available or could have been obtained, it might have been wise to administer it. The Committee felt the decision to do the section rather than try to decompress the head and deliver her vaginally was correct. Had this not been done there may have been a longer lag before the ruptured uterus was discovered.



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Use of broad-spectrum antibiotics can cause fungal overgrowth in the alimentary tract... and give rise to symptoms so troublesome that therapy must be prematurely stopped. Tetrex-F (tetracycline phosphate complex-nystatin) helps you circumvent this problem.

The nystatin can prevent overgrowth of monilia; the phosphate complex delivers tetracycline to the blood rapidly. Side effects are infrequent.

High-Risk Patients

Tetrex-F (tetracycline phosphate complex-nystatin) is especially useful in patients most susceptible to fungal overgrowth during tetracycline therapy: (1) the elderly or debilitated, (2) young children, (3) the diabetic, (4) those on long-term tetracycline therapy, (5) those on steroid therapy, (6) those who have had moniliasis before, and (7) pregnant patients with a history of monilial vaginitis.

When you start with economical Tetrex-F (tetracycline phosphate complex-nystatin), you can complete the full course of broad-spectrum therapy with less chance of losing control elsewhere. A good start for a healthy finish.

PRESCRIBING INFORMATION. For complete information consult Official Package Circular. *Indications:* Infections of res piratory, gastrointestinal and genitourinary tracts and skin an soft tissues due to tetracycline-sensitive organisms, in patient with increased susceptibility to monilial infections. *Contraindi cations:* The drug is contraindicated in patients hypersensitiv to its components. *Warnings:* Photodynamic reactions have bee produced by tetracyclines. Natural and artificial sunlight shoul be avoided during therapy. Stop treatment if skin discomfor occurs. With renal impairment, systemic accumulation and hep atotoxicity may occur. In this situation, lower doses should b used. Tooth staining and enamel hypoplasia may be induce during tooth development (last trimester of pregnancy, neonat period and childhood). *Precautions:* Bacterial superinfectior may occur. Infants may develop increased intracranial pressur with bulging fontanels. In gonorrheal therapy, serologic tes for syphilis should be conducted initially and monthly for months. *Adverse Reactions:* Glossitis, stomatitis, nausea, dia rhea, flatulence, proctitis, vaginitis, dermatitis, and allergic r actions may occur. *Usual Adult Dosage:* 1 capsule q.i.d. Co tinue for 10 days in Beta-hemolytic streptococcal infectior Administer one hour before or two hours after meals. *Supplie* Capsules, bottles of 16 and 100. Each capsule contains tetr cycline phosphate complex equivalent to 250 mg. tetracycli HCl activity and 250,000 units of nystatin. For Oral Suspensic 125 mg. tetracycline and 125,000 u. nystatin/5 ml., 60 ml. bottles

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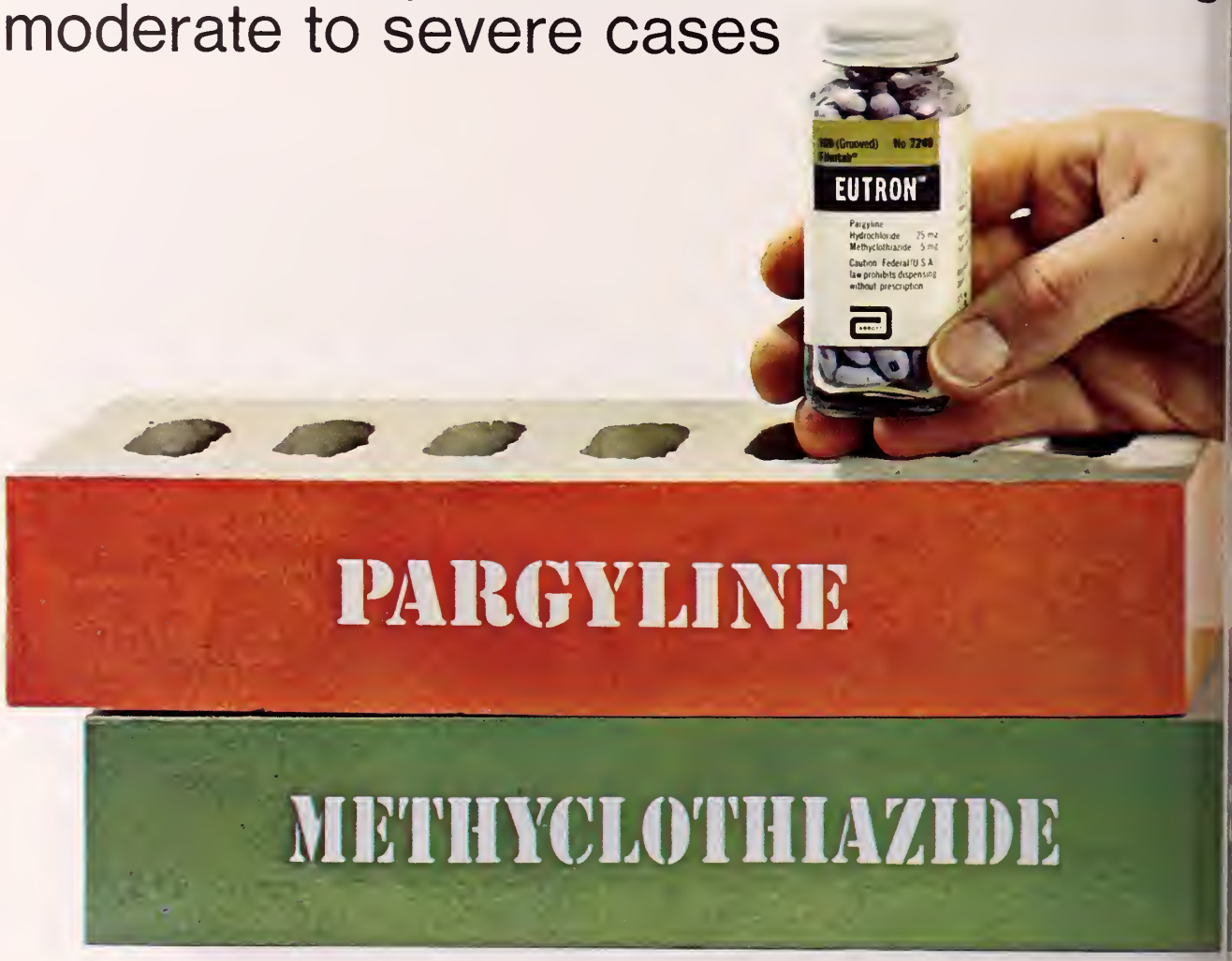
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MILD TO MODERATE TO SEVERE



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Each tablet contains Methyclothiazide 5 mg. with Deserpidine 0.25 mg. or 0.5 mg.

Indications: Edema and mild to moderate hypertension (Enduron), and mild to moderately severe hypertension (Enduronyl). More potent agents, if added, can be given at reduced dosage.

Contraindications: Sensitivity to thiazides; severe renal disease (except nephrosis) or shutdown; severe hepatic disease or impending hepatic coma (hepatic coma due to hypokalemia has been reported in patients on thiazides). Do not use Enduronyl in severe mental depression, suicidal tendencies, active peptic ulcer, or ulcerative colitis.

Warnings: Consider possible sensitivity where there is history of allergy or asthma. If added potassium is indicated, dietary supplementation is recommended. Reserve enteric-coated potassium tablets for cautious use only when necessary, as they may induce serious or fatal small bowel lesions (stenosis with or without ulceration), cause obstruction, hemorrhage, and perforation often requiring surgery; discontinue them immediately if abdominal pain, distention, nausea, vomiting, or g.i. bleeding occurs. Neither Enduron nor Enduronyl contains added potassium.

Precautions: Use thiazides cautiously in severe renal dysfunction, impaired hepatic function or progressive liver disease; also in pregnancy (bone marrow depression, thrombocytopenia, and altered carbohydrate metabolism have been reported in certain newborn). In surgery, thiazides may reduce response to vasopressors, and increase response to tubocurarine. Antihypertensive response may be enhanced following sympathectomy. Watch for electrolyte imbalance (e.g., hyponatremia) in all patients. In hypokalemia (especially in digitalized patients) give supplemental potassium. In hypochloremic alkalosis, give supplemental chloride.

Use rauwolfias with caution in patients with history of peptic ulcer. Rauwolfias with anesthetics may produce hypotension and bradycardia. Discontinue Enduronyl two weeks before elective surgery. Consider vagal blocking agents during emergency surgery. In epilepsy, adjust anticonvulsant dosage. In electroshock, shorten stimulus strength and duration. In occasional patients with depressive tendencies, rauwolfias may precipitate severe mental depression that usually disappears when drug is stopped.

Adverse Reactions: Thiazide reaction include blood dyscrasias (thrombocytopenia with purpura, agranulocytosis, aplastic anemia); elevation of BUN, serum uric acid or blood sugar; anorexia, nausea, vomiting, diarrhea, headache, dizziness, paresthesia, weakness, skin rash, photosensitivity, jaundice, symtomatic gout, and pancreatitis. Cutaneous vasculitis in the elderly has been reported with other thiazides. Adverse effects with deserpidine are qualitatively similar to those with reserpine, but their incidence is lower. These include nasal stuffiness, abdominal cramps or diarrhea, nausea, headache, weight gain, reduced libido and potency, peptic ulcer aggravation, epistaxis, skin eruption, asthma in susceptible patients, electrolyte imbalance, excessive salivation, and a reversible Parkinson's syndrome. Excessive drowsiness, fatigue, weakness, and nightmares may signal mental depression. Thrombocytopenia, purpura, and a symptom manifested by dull sensorium, deafness, uveitis, glaucoma, and optic atrophy are rare allergic reactions to other rauwolfias. Hypotension from antihypertensive agents may precipitate angina attacks in susceptible individuals. Usually adverse reactions disappear when drug is withdrawn.

EUTRON™

Each tablet contains Pargyline Hydrochloride 25 mg. with Methyclothiazide 5 mg.

Indications—Moderate to severe hypertension.

Contraindications—Pheochromocytoma, paranoid schizophrenia, hyperthyroidism and advanced renal failure. Not recommended in malignant hypertension, children under 12, pregnant patients.

Do not use with: centrally or peripherally acting sympathomimetic drugs; foods high in tyramine (e.g., aged and natural cheeses); parenteral reserpine or guanethidine; imipramine, amitriptyline, desipramine, nortriptyline or their analogues; other monoamine oxidase inhibitors; methyldopa or dopamine; separate Eutron and these agents by two weeks.

Sensitivity to thiazides; severe renal disease (except nephrosis) or shutdown; severe hepatic disease; impending hepatic coma from thiazide-induced hypokalemia.

Warnings—Patients: 1. No other drugs (particularly "cold preparations" and antihistamines), cheese or alcohol without physician's consent. 2. Promptly report orthostatic symptoms, severe headache, other unusual symptoms. 3. Angina pectoris or coronary artery disease patients must not increase physical activity with improved anginal symptoms or well-being.

Physicians: 1. Use antihistamines, hypnotics, sedatives, tranquilizers and narcotics (meperidine contraindicated) cautiously in reduced doses. 2. Stop Eutron two or more weeks before elective surgery; in emergency surgery reduce premedication (narcotics, sedatives, analgesics, etc.) to 1/4 to 1/5; carefully adjust anesthetic dosage to patient response. 3. Use cautiously in advanced renal failure. 4. Pargyline may induce hypoglycemia. 5. Consider possible sensitivity reactions when a history of allergy or asthma is present. 6. If potassium is indicated, dietary supplement is recommended; enteric-coated potassium tablets may induce serious or fatal small bowel lesions (stenosis with or without ulceration), cause obstruction, hemorrhage, and perforation frequently requiring surgery; discontinue medication immediately if abdominal pain, distention, nausea, vomiting or gastrointestinal bleeding occurs; Eutron does not contain added potassium. 7. Possible systemic lupus erythematosus has been reported for thiazides.

Precautions—Pargyline: Use cautiously at reduced dosage: caffeine, alcohol, antihistamines, barbiturates, chloral hydrate, other hypnotics, sedatives, tranquilizers, narcotics. Periodically do urinalyses, blood counts, liver function tests, etc. Use with caution in liver disease. Watch for orthostatic hypotension, especially in impaired circulation (e.g., angina pectoris, coronary artery disease, cerebral arteriosclerosis); also, augmented hypotension in concomitant febrile illnesses. Reduce or discontinue if hypotension is severe. In impaired renal function watch for cumulative drug effects, elevated BUN and other evidence of progressive renal failure; withdraw drug if these persist. In surgery increased central depressant response (hypotension and increased sedative effect) can be controlled by (1) discontinuing at least two weeks prior; (2) in emergency surgery lowering dose of premedication; (3) when necessary, administering a vasopressor. Do not use in hyperactive and hyperexcitable patients. Pargyline may unmask severe psychotic symptoms where emotional problems pre-exist. Use cautiously in Parkinsonism, especially with antiparkinsonian agents. In prolonged therapy, examine for change in color perception, visual fields, fundi and visual acuity. Also, prolonged therapy has made certain patients refractory to nerve blocking effects of local anesthetics.

Methyclothiazide: Use cautiously in severe renal dysfunction, impaired hepatic function or progressive liver disease; also in pregnancy (bone marrow depression, thrombocytopenia, and altered carbohydrate metabolism have been reported in certain newborn). In surgery thiazide may reduce vasopressor response and increase tubocurarine response. Antihypertensive response may be enhanced following sympathectomy. Watch for electrolyte imbalance (e.g., hyponatremia). Give supplemental chloride if hypochloremic alkalosis occurs and supplemental potassium if hypokalemia occurs (especially in digitalized patients). Thiazides may decrease serum P.B.I. without signs of thyroid disturbance.

Adverse Reactions — Pargyline: Orthostatic hypotension and associated symptoms, mild constipation, fluid retention, edema, dry mouth, sweating, increased appetite, arthralgia, nausea, vomiting, headache, insomnia, difficult in micturition, nightmares, impotence, delayed ejaculation, rash, purpura, weight gain, hyperexcitability, increased neuromuscular activity and other extrapyramidal symptoms. Drug fever is extremely rare. Reduction in blood sugar and hypoglycemic effects are possible. Congestive heart failure has been reported in a few patients with reduced cardiac reserve.

Methyclothiazide: Blood dyscrasias (thrombocytopenia with purpura, agranulocytosis, aplastic anemia); elevation of BUN, blood sugar or serum uric acid (gout may be induced); anorexia, nausea, vomiting, diarrhea, headache, dizziness, paresthesia, weakness, skin rash, photosensitivity, jaundice and pancreatitis. Cutaneous vasculitis in elderly patients has been reported with other thiazides.

If side effects are severe or persist, reduce dosage or withdraw drug. 804438R

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Pancreatic Injury†

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Forty-one cases of injury to the pancreas from external trauma are reported. Twenty-four were penetrating injuries and 17 were from blunt trauma. Factors influencing the symptoms, diagnosis, treatment, complications and mortality are studied.

PANCREATIC injuries have been reported to be infrequent. In the Korean conflict only nine pancreatic injuries were reported.[1] In a larger series reported from World War II only 62 patients were treated.[2] Composite series place its incidence between one and two percent of abdominal injuries reported.[3] This may be due, in part, to its deep location and its protection by other organs. Also of influence may be that vital adjacent organs are often injured simultaneously, resulting in death prior to the time the patient reaches medical help.

It appears that this injury has become more frequent and important in the last decade. Part of this is due to the increase in abdominal trauma from traffic accidents, which now in the United States involve about four million people yearly.[4] Part is due to improved care of the injured such as the speed of transport to the hospital and more rapid and efficient care in the hospital.

In the past the surgeon has been reluctant to deal aggressively with injuries to this organ. This has probably been due to its vascularity, its inaccessability and fear of the consequences of setting up inflammation in this organ.

This conservative approach to pancreatic injury, with or without surgery, has increased both the morbidity and the mortality.[5, 6]

Clinical Material

In order to take a closer look at this problem a study was undertaken of all the pancreatic injuries resulting from external trauma treated surgically in Louisville, Kentucky, during the 11-year period from 1956 through 1966. Eleven hospitals in Louisville, Kentucky, were canvassed. Clinical records of 41 patients were collected and analysed. Of these patients, 63 percent were treated at Louisville General Hospital. The remaining 37 percent were treated at seven of the private hospitals. The patients in this study ranged in age from a 10-year-old girl who fell off a bicycle to a 53-year-old man who was shot in the abdomen. Thirty-two were male, nine were female. There were eight deaths, giving an overall mortality of approximately 20 percent.

There were 24 penetrating wounds. (Table I) Twenty of these were gunshot wounds, one

TABLE 1

TYPE OF INJURY AND MORTALITY

TYPE OF INJURY	NUMBER OF PATIENTS	MORTALITY NUMBER	MORTALITY PERCENT
Blunt	17	0	0
Automobile	12	0	0
Fall	2	0	0
Crush	3	0	0
Penetrating	24	8	33%
Gunshot	20	6	30%
Shotgun	1	1	100%
Stab	3	1	33%
TOTAL	41	8	20%

†*Presented before the Kentucky Surgical Society, May 19, 1967*
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a shotgun wound and three were stab wounds. Seventy-nine percent of the penetrating wounds were treated at the Louisville General Hospital. This reflects the high activity of their Emergency Service. Injuries attended by police were usually taken to the General Hospital unless a private institution was specifically requested by the patient. The overall mortality of the penetrating wounds was 33 percent.

There were 17 blunt injuries. Twelve of these were secondary to automobile injuries, two were falls and three were crushes. There were no deaths associated with the blunt injuries. This is in contrast to other studies of blunt trauma to the pancreas where the mortality varies from nine percent to 21 percent.[7, 8]

The injuries involved all segments of the pancreas. The most frequent sites of injury in penetrating wounds of the pancreas were the body and tail—(42 percent involved the tail, 33 percent the body). In blunt injuries the exact site of the pancreas involved was more difficult to evaluate. Records were sometimes vague. A generalized contusion however appeared to be the most frequent injury in this group, accounting for 35 percent. Fifty-three percent of the patients who had blunt injuries sustained pancreatic tears. Of the nine pancreatic tears eight were caused by automobile accidents. Fifty percent of these were complete transections. Three out of the four complete transections occurred in the body of the pancreas, while 60 percent of the partial tears occurred in the tail.

The above illustrates the vulnerability of the pancreas to blunt trauma. The head and body of the pancreas as well as the second portion of the duodenum are fixed to the posterior parietes. When the impact is directly over the body of the pancreas this soft friable structure is crushed over the vertebral column, tearing it partially or completely. Usually the superior mesenteric vessels are undamaged. When the impact is directed to the right upper quadrant, the liver is forced upward and the colon downward. The head of the pancreas and the second portion of the duodenum are crushed and often the gastrodenodenal artery and the common bile duct are torn. In automobile accidents the steering wheel can be the cause of this trauma.[9]

In 90 percent of the patients in this series there were associated abdominal injuries present. All of the penetrating injuries had other organs injured. The majority (76 percent) of the blunt injuries had from one to four other organs injured. This is in contrast to a study from Cook County Hospital where 70 percent of the blunt injuries had no associated organ injuries.[10]

The number of associated injuries significantly influenced the mortality rate. When the pancreas alone was injured there were no deaths. With the presence of three associated organ and/or vessel injuries there was a 43 percent mortality. The percentage increased significantly, to 57 percent, when four or more associated injuries were present. The spleen, major vessels and their branches and stomach were damaged most frequently in blunt injuries. The stomach, liver, and major vessels were damaged most frequently in penetrating injuries. The one shotgun injury, as might be anticipated, resulted in extensive abdominal damage and death.

None of the 17 patients in this series who sustained blunt trauma died, even though associated organs injured were often identical to those in the penetrating trauma group. Injury to major vessels constituted the primary factor in mortality and hemorrhage was a direct cause of death in six patients; five deaths occurred in the operating room (four gunshot and one shotgun wound). Hemorrhage accounted for 75 percent of the mortality in this series.

Symptoms and Diagnosis

In the penetrating wounds no attempt was made to diagnose the extent of the injury prior to surgery. Over 60 percent of the patients with these injuries arrived in the hospital in shock. All were taken immediately to surgery. Penetration of the abdominal wall or lower chest area was considered sufficient indication for surgical exploration. In a few instances pre-operative x-rays were obtained in order to determine the nature of the associated chest injury or whether the abdomen was involved.

It was more difficult to decide to operate in blunt abdominal trauma cases. About half the cases were observed less than two hours prior to surgery. Observation in others varied from 12 hours to 18 days. One patient who had been in an automobile accident was operated

upon 14 days later. She had been seen immediately after the accident. Complaints and clinical findings were minimal. Blood count and x-ray films were normal. Ten days later she returned, complaining of upper abdominal pain, nausea and vomiting. There was marked abdominal tenderness, temperature elevation to 100 degrees, and leucocytosis of 21,000. Chest and abdominal x-ray films again were normal. At surgery extensive traumatic pancreatitis was present with resultant partial obstruction of the distal common duct.

All of the cases of blunt injury complained of abdominal pain and tenderness. Although abdominal rigidity did develop in most of the patients, still many did not show the sign. The retroperitoneal position of the pancreas unquestionably minimized the signs of peritoneal irritation. Shock was present in only two of the 17 cases. Several patients were observed 30 to 40 hours before exploration was decided upon.

Pre-operative, serum amylase was elevated in only two out of five cases; x-rays were helpful in two out of five; white blood counts were elevated over 15,000 in two out of five; and needle paracentesis was positive in three out of five cases. This is admittedly a small and selected number. However, it does emphasize that these tests alone are not diagnostic. X-ray films and white blood counts probably are of least help. Although needle paracentesis has been reported to be accurate in 79 percent of patients with abdominal injuries from blunt trauma[11], this high percentage probably reflects injury to associated organs. When the pancreas alone is injured a peritoneal tap shortly after the injury usually does not produce enough fluid even for an amylase determination. Nor is the serum amylase level a dependable test of specific pancreatic injury. It has been shown that trauma, such as tearing of the pancreas, may initiate a protective mechanism which decreases secretion.[12] This may have happened in those cases in this series where the amylase levels were normal.

The diagnosis in cases of blunt injury may really depend on a high index of suspicion. Clinical findings are often not dramatic or specific, even when there is considerable pancreatic damage. Even at surgery the diagnosis may be missed. It is important that exploration be thorough. The lesser sac should be opened, usually through the gastrocolic omentum, and the entire pancreas visualized. One must look for edema, hematoma, ecchymosis, fat necrosis and disruption of the parenchyma. The lateral edge of the duodenum and the inferior edge of the pancreas may be incised to allow for exploration.

Surgical Management and Results

Five types of surgical procedures were employed in the treatment of the pancreatic injuries in this series. (Table 2) The most common procedure was drainage only, used in 42 percent. Suture and drainage was used in 33 percent. Partial pancreatectomy was used in 19 percent.

All of the patients in this series were drained except one and this patient subsequently developed an abscess. The simple penrose drain was used in 24 cases or 67 percent. It was used exclusively during the first five years of this series, but it is of interest that in the last two years the sump drain had almost entirely replaced it.

TABLE 2

METHOD OF TREATMENT AND TYPE OF DRAIN

METHOD OF TREATMENT	TYPE OF DRAIN		COMPLICATIONS			TOTAL NUMBER OF PATIENTS
	SUMP	PENROSE	SUMP	PENROSE	NONE	
Partial Pancreatectomy	3	4	1	2	4	7
Suture and Drainage	5	7	4	3	5	12
Drainage Only	3	12	0	3	12	15
Chelocysto-jejunostomy	0	1	0	0	1	1
Suture Only*	0	0	0	0	0	1
TOTAL	11	24	5	8	22	36

* Patient's chart did not indicate that any drainage was used, but noted that the patient developed an abscess.

In the group treated by partial pancreatectomy, there were no deaths despite the fact that all had sustained severe pancreatic injuries. However, three patients out of the seven did develop major complications.

Of these three patients, two developed abscesses. Both had been drained by means of penrose drains. The third patient had a perforation of the stomach which probably was overlooked at original exploration. In this patient the sump drain which had been placed at initial surgery was of great value in preventing further problems during the spontaneous closure of the perforation.

In the group treated by drainage alone, most were thought to have minimal pancreatic injuries. Three patients out of the 15 developed complications. One of these patients died of lower nephron nephrosis. The second patient developed obstruction of the distal common duct from traumatic pancreatitis. The third patient developed a pancreatic fistula and abscess and died. The initial drainage used in this case was also a penrose drain. Sump drainage was used in only three patients in this group and none of these had complications.

In the group treated by suture and drainage, most had severe pancreatic injuries. Five patients out of the 12 developed major complications. Four of these patients had pancreatic fistulas. The fifth developed a pseudocyst and died of hemorrhage from rupture of the gastroduodenal artery in the cyst. Of the four patients who had pancreatic fistulas, three were drained initially by sump drains and one by penrose drain. Three of these fistulas went on to spontaneous closure. The fourth developed a pseudocyst and required a subtotal pancreatectomy seven months later.

Two patients in the series required operative procedures for correction of obstruction of the common duct due to traumatic pancreatitis. One was treated by choledochoduodenostomy five months after trauma. The other was treated with cholecystojejunostomy at the initial exploration two weeks after the trauma.

One patient in this series was treated by suture without drainage. An abscess developed which resolved with drainage.

In summary, if one excludes the pulmonary complications, the most frequent complication among the 36 patients who survived the operation was pancreatic fistula, occurring in five patients (14 percent). The next most frequent was abscess occurring in three patients (eight percent) and pseudocyst in two patients (five percent). Some degree of pancreatitis undoubtedly occurred in all the patients but was seldom of clinical significance. From this study there is no statistical evidence of the superiority of sump drainage over penrose drainage, since the complication rate was about equal in the two groups. However, if one considers that sump drainage was usually used in the more severely injured pancreas in this series, then superiority of the sump drain may be inferred.

Operative management is determined by the nature and extent of pancreatic injury. If bleeding is present, this must be controlled first. If necrotic tissue is present, it should be debrided. If the pancreas is simply contused, drainage is all that is necessary. If there is a laceration without major duct division, suture and drainage is indicated. If there is a major duct division, then the treatment depends on its location. If it is in the body or tail of the pancreas, then distal pancreatectomy may be the safest and simplest expedient. Or, internal drainage into a defunctionalized jejunal loop may be performed. If there is severe injury to the ductal system of the head, then the pancreatic head and duodenum may have to be excised along with repair of the biliary system. In all cases drainage, preferably by the sump drain, is axiomatic.

Case Report

A 28-year-old man sustained a blow to the epigastric area by a metal rod. Seen one hour later in the Emergency Room he complained of slight discomfort and tenderness in the epigastric area. Findings at this time were minimal. X-rays of the abdomen and chest were normal. However, by evening his discomfort had increased. White blood count was elevated to 14,000. Urinalysis was normal. By the following day there was marked upper abdominal tenderness with rigidity and rebound. Serum amylase, however, was normal. Exploratory laporatomy was performed 32 hours after the injury. This revealed contusion of

the pancreas with swelling, small areas of hemorrhage and multiple areas of fat necrosis. There was blood tinged fluid present in the peritoneal cavity but no other injuries were found. Drainage of the pancreatic bed was instituted. The drains were removed after two weeks when all drainage had stopped. The patient's post-operative course was entirely uneventful and no long-term problems have been noted.

Summary

1. Pancreatic injuries appear to be on the increase. (Auto accidents are a factor here).

2. Injury to major blood vessels constitutes the primary factor in mortality.

3. Symptoms and findings initially may be minimal.

4. Diagnosis can present a problem and a high index of suspicion must be maintained.

5. An aggressive surgical approach is usually the safest one. Surgical management is discussed. Sump drainage in all cases is advocated.

References

1. Sako, Y., Artz, C. P., Howard, J. M., Bronwell, A. W., and Inair, F. K: A Survey of Evacuation Resuscitation and Mortality in a Forward Surgical Hospital. *Surgery* 37: 602, 1955.

2. Pool, L. H.: *Wounds of the Pancreas.* Surgery in World War II, Chapter XIX. Office of the Surgeon General, Washington, D.C., 1955.

3. Griswold, R. A., and Collier, H. S.: Blunt Abdominal Trauma, Intern. *Abstracts Surg.* 112: 309-317, April, 1961.

4. Shires, G. T.: *Care of the Trauma Patient,* New York Blakiston Div., McGraw, Hill, 1966, 354.

5. Cleveland, H. C., Reinschmidt, J. S. and Woddell, W. R.: Traumatic Pancreatitis, An Increasing Problem. *Surg. Clin. N. Amer.,* 43:401-411, 1963.

6. Baker, R. J., Dippel, W. F., Freeark, R. J. and Strohl, E. L.: Surgical Significance of Trauma to the Pancreas. *Arch. Surg.* 86, 1038-1944, 1961.

7. Howell, J. F., Burrus, R. G. and Jordan, G. L.: Surgical Management of Pancreatic Injuries. *J. Trauma 1*: 32-40, 1961.

8. Sturim, H. S.: The Surgical Management of Pancreatic Injuries. *J. Trauma* 5: 693-702, 1965.

9. Thal, A. P., Wilson, R. F.: A Pattern of Severe Blunt Trauma to the Region of the Pancreas. *Surg., Gynec, and Obstetrics* 119: 773-778, Oct. 1964.

10. Baker, R. J., Freeark, R. J., Strohl, E. L.: *An Assessment of the Management of Pancreatic Disruption Following Trauma*: Collected Papers of the XXI Congress of the Intern. Soc. of Surg. 554-565, 1965.

11. Williams, R. D., Zollinger, R. M.: Diagnostic and Prognostic Factors in Abdominal Trauma: *American Journal of Surgery* 97: 575-578, May, 1959.

12. Popper, H. L. and Necheles, H.: Pancreatic Injuries: *Surg., Gynec. Obstet.*: 93: 621, 1951.

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Current Diagnosis and Therapy Of Cardiac Amyloidosis

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Seven patients with cardiac amyloidosis are presented to illustrate current diagnostic criteria and treatment of this unusual disease. One patient has experienced a long survival period with melphalan administration.

CARDIAC amyloidosis is usually unrecognized prior to post-mortem examination. Clinical findings are non-specific and, therefore, most cases are misdiagnosed as constrictive pericarditis, idiopathic myocardopathy, or arteriosclerotic heart disease. Most patients succumb to intractible congestive heart failure within one year[1-7] even when an antemortem diagnosis of cardiac amyloidosis is made since there is no known therapy.

Seven patients with congestive heart failure secondary to cardiac amyloidosis are the subject of this report. The patients were admitted to either Louisville General Hospital, Louisville, Kentucky, or the University of Texas Medical Branch, Galveston, Texas, between the years 1961 and 1968. Cardiac amyloidosis was suspected in all cases prior to death by correlating a selective biopsy or positive Congo Red test with clinical, electrocardiographic, and x-ray findings. Since very little information can be found in the literature concerning maintenance care or direct therapeutic approach to cardiac amyloidosis, the therapeutic results obtained in each patient are presented in detail. One patient (Case #5) had a long survival period apparently due in part to long-term melphalan (Alkeran^{R}) administration.

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Case Reports

Case #1—E.G. #114 457

An 85-year-old Negro male was admitted to Louisville General Hospital on 1-2-67 with a one-month history of pedal edema, exertional dyspnea, asthenia, and dysphonia. There was no history of hypertension, exertional chest pain, or diabetes.

Physical examination revealed a chronically ill man with a blood pressure of 110/60 and pulse of 90/minute. The heart was enlarged to the left of the mid-clavicular line and the first and second heart sounds were diminished but of equal intensity. A Grade 2/6 soft systolic murmur was heard over the precordium. Other pertinent positive physical findings were macroglossia, axillary and inguinal adenopathy, basilar crepitant rales, hepatosplenomegaly, and 4+ pitting sacral and pedal edema.

Laboratory findings were as follows: hemoglobin 10.9 gm.%; erythrocyte sedimentation rate 52mm./hr.; 1+ proteinuria; serum electrophoresis showed "M" type globulin spike; chest roentgenogram revealed generalized cardiomegaly and bilateral pleural effusions; electrocardiogram showed left axis deviation, low voltage, premature ventricular contractions, interventricular conduction defect, and possible old inferior wall myocardial infarction; bone marrow aspiration showed 90 percent plasma cells. Bone survey, Bence Jones proteinuria, and Congo Red test were negative or normal. Gingival and lymph node biopsies were positive for amyloid.

Digitalis and cyclophosphamide (Cytoxan^{R}) 200mg. were administered daily. Severe nausea and paralytic ileus developed but resolved with discontinuance of digitalis. Mild improvement in congestive heart failure result-

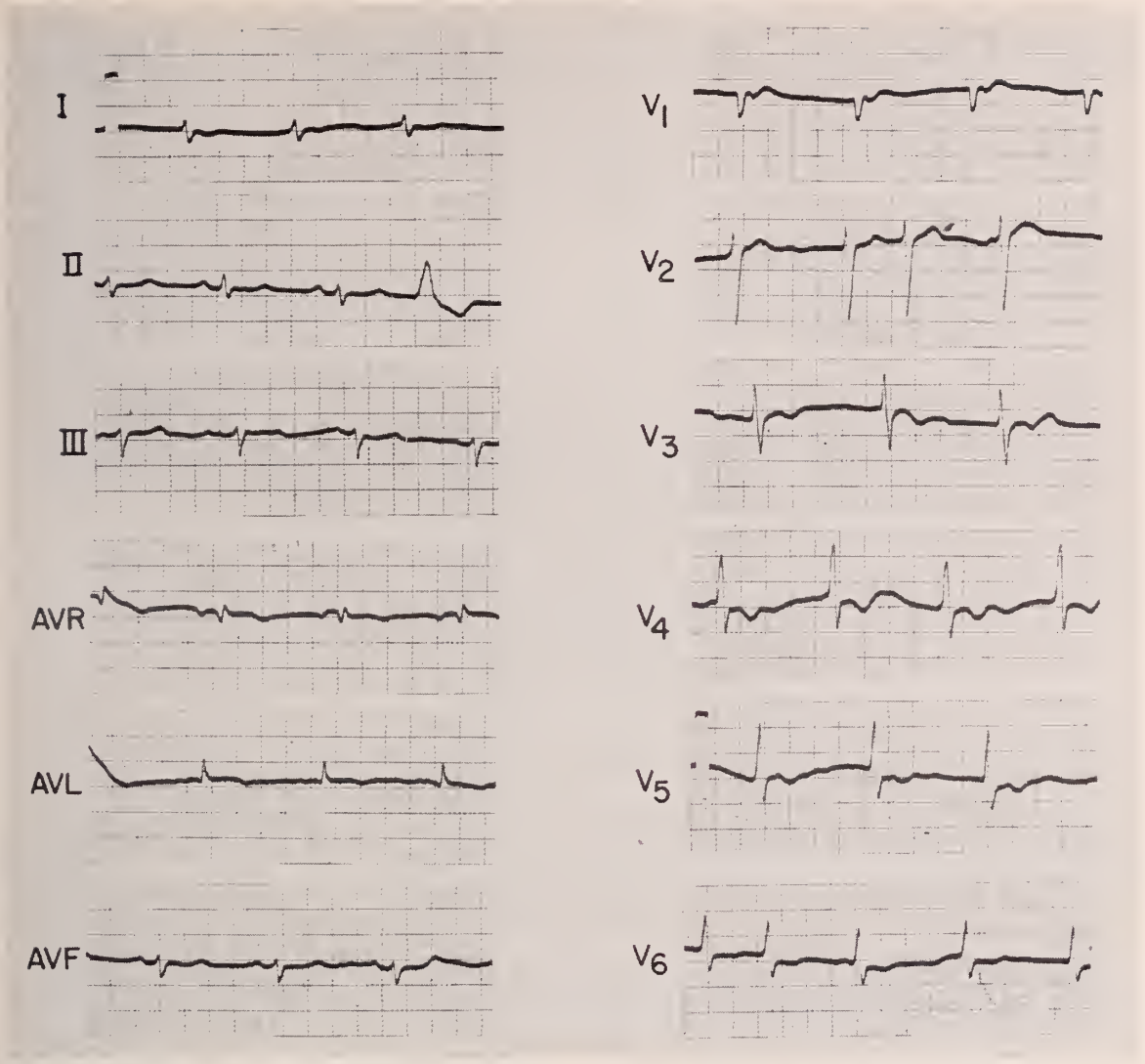


Figure 1: Standard 12-lead electrocardiogram for Case #2 showing low voltage in the limb leads, left axis deviation, digitalis effect, incomplete left bundle-branch block, and occasional atrial and ventricular premature contractions.

ed after bed rest and a low-sodium diet. He was dismissed on cyclophosphamide (Cytoxan[R]), but he expired at home one month later.

Case #2—A.G. #113067 M

A 72-year-old white male was admitted to the University of Texas Medical Branch on 12-16-61 with a four-month history of pedal edema, exertional dyspnea, asthenia, anorexia, abdominal discomfort, occasional vomiting, and a 40-pound weight loss. There was no history of hypertension, exertional chest pain or diabetes.

Physical examination revealed a thin, chronically ill man with a blood pressure of 80/60 and pulse of 80/minute. The heart was enlarged to the left of the mid-clavicular line, and the first and second sounds were diminished but of equal intensity. A Grade 2/6 blowing, systolic murmur was heard at the apex. Other pertinent positive physical findings were crepitant basilar rales and 1+ pitting, bilateral pedal edema.

Laboratory findings were as follows: hemoglobin 9.9gm.%; 1+ proteinuria; chest roentgenogram showed generalized cardiomegaly and bilateral pleural effusions; electrocardiogram revealed low voltage, in the limb leads, left axis deviation, premature atrial and ventricular contractions, and incomplete left bundle-branch block (Figure 1); bone marrow aspiration showed a marked increase in plasma cells. Bone survey, serum electrophoresis, Bence Jones proteinuria, and erthrocyte sedimentation rate were negative or normal. A Congo Red test showed 17 percent dye reten-

tion in the serum at one hour (normal above 40 percent). Urine culture isolated a pure growth of Escherichia Coli.

Treatment included digitalis, mercurial diuretics, and amminophylline. Despite these measures the patient developed progressive pulmonary edema and expired on his 29th hospital day. Autopsy findings revealed chronic pyelonephritis and amyloid deposits in the heart, kidneys, speen, adrenals, liver, and gastrointestinal tract.

Case #3—A.J. #042145-P

A 59-year-old white female was admitted to the University of Texas Medical Branch on 4-17-65 with a three-month history of pedal and periorbital edema, exertional dyspnea, fatigue, and 10-pound weight gain. There was no history of hypertension, exertional chest pain or diabetes.

Physical examination revealed a moderately obese woman with a blood pressure of 120/80 and pulse of 88/minute. First and second heart sounds were diminished but of equal intensity. There were no murmurs or cardiomegaly. Other pertinent positive physical findings were crepitant right basilar rales, 2+ pitting, bilateral, pedal edema, and periorbital edema.

Laboratory findings were as follows: hemoglobin 13.3gm.%; blood urea nitrogen 27mg.%; 2+ proteinuria; urine protein 7.65 gm./24 hrs.; serum electrophoresis showed decreased gamma globulin and albumin fractions with increased alpha-2 globulin; chest roentgenogram revealed a normal size heart and coarsely granular, bilateral pulmonary infiltrations (Figure 2); electrocardiogram showed low voltage. Open lung biopsy proved the pulmonic infiltrations to be amyloid deposits. Percutaneous renal biopsy was also positive for amyloid.

Thiazide diuretics and a high protein diet controlled the patient's nephrotic syndrome, and she was discharged within a month. In April, 1966, the patient developed cardiomegaly, and severe congestive heart failure. Despite the administration of digitalis, thiazides, and mercurial diuretics, she expired four weeks after the onset of congestive heart failure.

Case #4—M.K. #81826-P

A 48-year-old white female was admitted to the University of Texas Medical Branch on 6-24-67 with a three-month history of pedal edema, dyspnea with rest and exertion, asthenia, dysphagia, nausea, and a 40-pound weight loss. There was no history of hypertension, exertional chest pain, or diabetes.

Physical examination revealed a thin, poorly nourished, chronically ill white female with a blood pressure of 90/70 and pulse of 88/minute. The heart was enlarged to the left of the mid-clavicular line, and the first and second heart sounds were diminished but of equal intensity. There was no murmur. Other pertinent positive physical findings were crepitant rales and friction rub over the left lung base, hepatomegaly, and 2+ pitting bilateral, pedal edema.

Laboratory findings were as follows: hemoglobin 15.0gm.%; total serum proteins 6.4-gm%.; albumin 2.5gm.%; globulin 3.9gm.%; serum and urine immunoelectrophoresis showed elevated gamma-G globulin; chest roentgenogram revealed generalized cardiomegaly, bilateral pleural effusions, and infiltrate in the left lower lobe; electrocardiogram showed low voltage, left axis deviation, and second degree atrioventricular block of the Wenckebach type; bone marrow aspiration showed an increase in plasma cells and lymphocytes. Urinalysis, Bence Jones proteinuria, and Rheuma-



Figure 2: Standard P-A chest roentgenogram of Case #3 showing a normal size heart, hilar adenopathy, and bilateral, coarsely granular pulmonary infiltrations. Open lung biopsy proved the infiltrations to be amyloid deposits.

toid factor were negative or normal. Skin and rectal biopsies were positive for amyloid.

The patient's congestive heart failure initially responded to a regimen of digitalis, mercurial and thiazide diurectics, spironolactone (Aldactone^{R}), and prednisone. She also received a four-day course of melphalan (Alkeran^{R}) 0.15mg./Kg./day, and she was dismissed after a three-week hospital stay. Progressive congestive heart failure ensued, and she expired at home within 10 weeks.

Case #5—L.T. #060696-P

A 74-year-old white female was admitted to the University of Texas Medical Branch on 4-11-66 with a six-month history of dyspnea with rest and exertion, asthenia, weight loss, and progressive macroglossia. There was no history of hypertension, exertional chest pain, or diabetes.

Physical examination revealed a thin, small woman with a blood pressure of 130/80 and pulse 80/minute. The heart was enlarged to the left of the midclavicular line, and first and second heart sounds were diminished but of equal intensity. A Grade 2/6 systolic murmur was present at the left sternal border. Other pertinent positive physical findings were macroglossia and crepitant rales bilaterally.

Laboratory findings were as follows: hemoglobin 9.0gm.%; Bence Jones proteinuria positive; serum electrophoresis showed an "M" type gamma-globulin spike; immuno-electrophoresis showed increased gamma-G globulin; bone marrow aspiration revealed increased plasma cells; chest roentgenogram showed generalized cardiomegaly and bilateral pleural effusions; electrocardiogram revealed low voltage; bone survey showed punched-out lesions in the right navicular and radius. Tongue biopsy was positive for amyloid (Figure 3).

During hospitalization the patient's congestive heart failure worsened. Digitalis and mercurial diuretics resulted in an eight-pound weight loss and resolution of pleural effusions. Theropy with melphalan (Alkeran^{R}) 0.15-mg./Kg./day was begun. Within three weeks she stated that her tongue was smaller, but this was equivocal to observers. On the 32nd hospital day, she was dismissed, and she has subsequently been maintained on melphalan (Alkeran^{R}) 0.15 mg./Kg. on alternating days for over 26 months. She remains well and ambulatory, and her weight is stable. The overall size of her tongue has equivocally decreased in size. It swells considerably between administrations of diuretics. In April, 1968, a chest roentgenogram revealed a normal size heart and no pleural effusions. The bone survey and serum electrophoresis at that time were normal, and Bence Jones proteinuria was not present. Her electrocardiogram remains unchanged. Digitalis and occasional mercurial diuretics or furoscemide (Lassix^{R}) maintain good control of congestive heart failure. She requires 1000 to 1500cc of blood monthly to maintain adequate hemoglobin levels.

Case #6—M.P. #13025-M

A 61-year-old Negro female was admitted to the University of Texas Medical Branch on 11-21-66 with a one-month history of pedal edema, orthopnea, exertional dypsnea, hypesthesia and paresthesia of both hands and forearms. Six months prior to admission she received therapy for a left thigh abcess which resulted from chronic osteomyelitis of the left femur. There was no history of hypertension, exertional chest pain, or diabetes.

Physical examination revealed a chronically ill woman with a blood pressure of 110/80 and pulse of 72/minute. The heart was enlarged to the axillary line, and heart tones were diminished but of equal intensity. A Grade 3/6 pansystolic murmur was present at the apex. Other pertinent positive physical findings were palpable sub-mandibular lymph nodes, basilar dullness bilaterally and de-

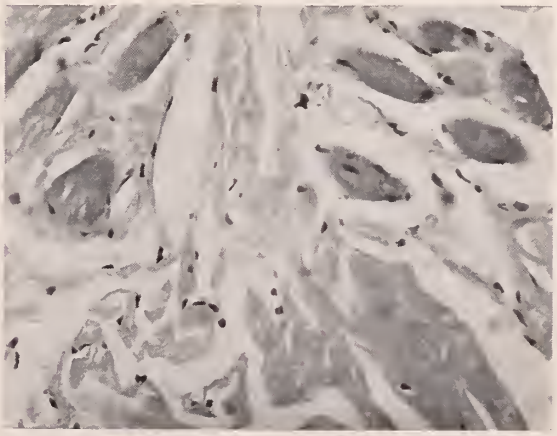


Figure 3: Photomicrograph of biopsy from enlarged tongue of Case #5 showing amyloid deposits between muscle bundles. (Hematoxylin-eosin; Magnification x 280)

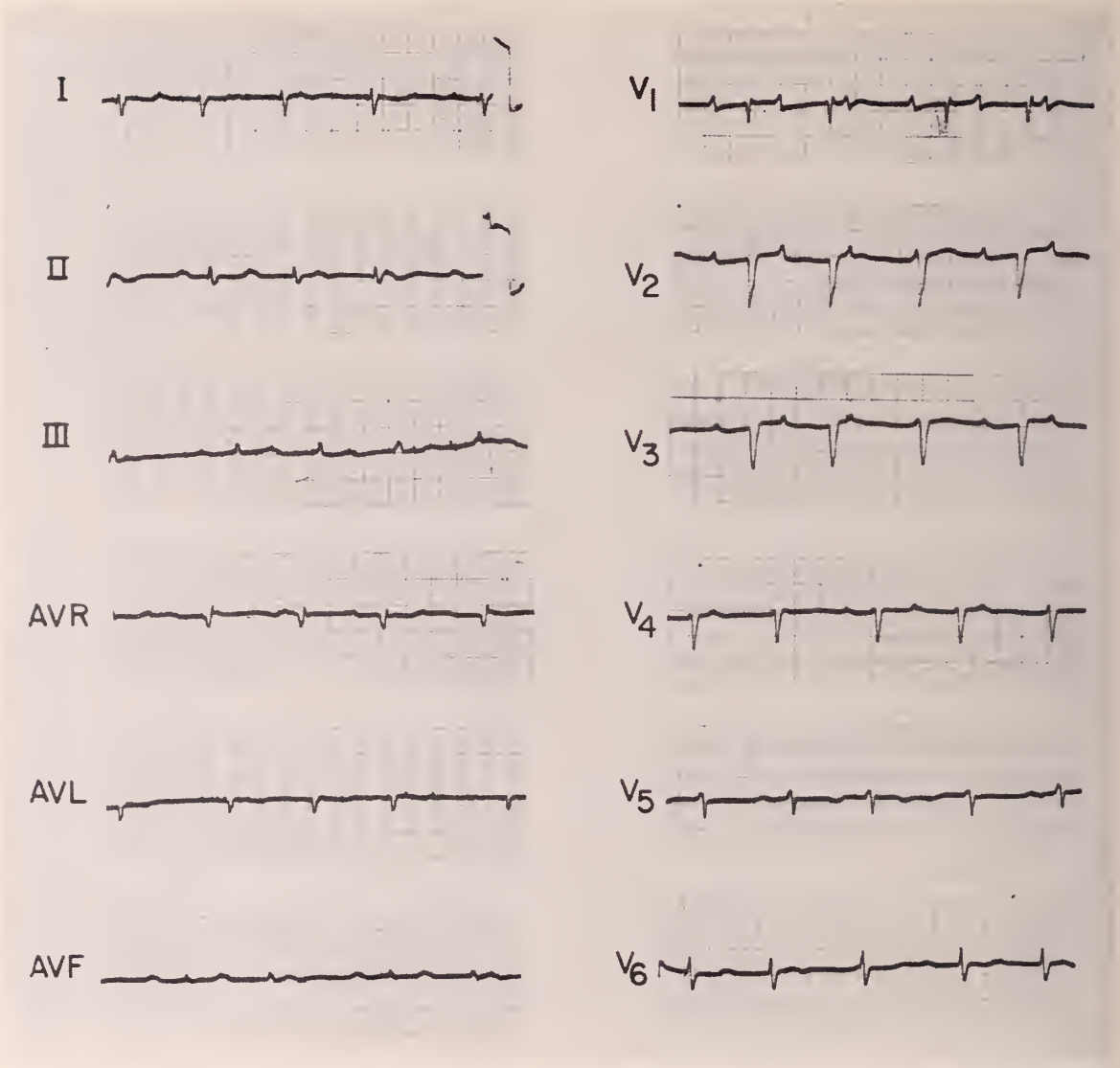


Figure 4: Standard 12-lead electrocardiogram of Case #7 showing second degree A-V block of the Wenckebach type, right axis deviation, incomplete right bundle-branch block, low voltage, and an old anteroseptal wall infarct pattern.

creased breath sounds, hepatomegaly, ascites, and 4+ pitting, bilateral, pedal edema.

Laboratory findings were as follows: hemoglobin 9.6gm.%; +4 proteinuria; serum electrophoresis showed decreased albumin, increased alpha-2 globulin, and normal gamma globulin; chest roentgenogram revealed generalized cardiomegaly and bilateral pleural effusions; electrocardiogram showed generalized low voltage and clockwise rotation; Congo Red test negative. Renal biopsy showed amyloidosis.

Digitalis, thiazides, and mercurial diuretics were unable to control congestive heart failure. However, a marked diuresis, diminution in pleural effusion, and 25-pound weight loss resulted with prednisone, 40mg. administered daily. A 19-day course of chloroquine, 500mg./day, produced no discernible benefit. On the 76th hospital day, she was dismissed on digitalis, chloroquine, 500mg./day, and prednisone, 15mg./day. She expired nine days after dismissal.

Case #7—K.L. #38003-P

A 44-year-old white female was admitted to the University of Texas Medical Branch on 11-16-64 with a three-month history of exertional dyspnea, pedal edema, myalgia, anorexia, asthenia, and 20-pound weight loss. There was no history of hypertension, exertional chest pain, or diabetes.

Physical examination revealed a chronically ill woman with a blood pressure of 120/70

and irregular pulse of 80/minute. The heart was enlarged to the left of the midclavicular line, and there was an irregular rhythm. A Grade 3/6 systolic murmur was heard at the apex. Other pertinent positive physical findings were dullness, decreased breath sounds, and crepitant rales over the right lung base; hepatomegaly; ascites; and 2+ bilateral, pitting, pedal edema.

Laboratory findings were as follows; hemoglobin 14.2gm.%; 2+ proteinuria; serum electrophoresis showed decreased albumin and normal globulin fractions; immuno-electrophoresis showed increased gamma-G globulin; bone marrow revealed increased plasma cells; chest roentgenogram showed generalized cardiomegaly and right-sided pleural effusion; electrocardiogram revealed second degree atrioventricular block, right axis deviation, incomplete right bundle-branch block, old anteroseptal wall scar, and low voltage. (Figure 4) Bence Jones proteinuria and Rheumatoid factor were negative. Gingival and muscle biopsies were positive for amyloid.

Digitalis, thiazide and mercurial diuretics, and a four-day course of melphalan (Alkeran^{R}) 0.15mg./Kg./day were administered which controlled congestive heart failure. She was dismissed after one month, but her condition rapidly deteriorated. On readmission bilateral pleural effusions (Figure 5), ascites, and 4+ bilateral, pedal edema were present. Digitalis and mercurial diuretics were ineffective, but ethacrynic acid (Edecrin^{R}) 50mg./day produced a marked diuresis resulting in an 18-pound weight loss and diminution of pleural effusions. Another four-day course of melphalan (Alkeran^{R}) 0.30mg./Kg./day was given. She was dismissed on digitalis and periodic ethacrynic acid (Edecrin^{R}), and she expired six months later on 8-10-65. Autopsy showed amyloid deposits in the heart, tongue, gastrointestinal tract, skin, soft tissues, liver, pancreas, kidneys, bladder, ovaries, adrenals, and spleen.



Figure 5: Standard P-A chest roentgenogram of Case #7 showing cardiomegaly and large pleural effusions which resolved after the administration of ethyacrynic acid.

Diagnosis

Systemic amyloidosis has been generally classified as primary when it occurs without any recognizable disease; secondary following a chronic disease process; or amyloidosis in association with multiple myeloma.[8] Cardiac amyloidosis occurs in 60 to 90 percent of all patients with systemic amyloidosis regardless of type.[9-11] A special form of primary amyloidosis which occurs in those above 80 years of age and localized to the heart is known as "senile cardiac amyloidosis." This rarely causes clinical symptoms.[12-13]

Congestive heart failure is the most prominent feature of cardiac amyloidosis. Six of the patients presented initially with congestive heart failure of obscure origin, and the seventh patient (Case #3) developed congestive heart failure one month prior to death. Other presenting symptoms in these patients included asthenia, fatigability, macroglossia, paresthesiae, and weight loss. Physical signs present were right and left ventricular failure, hypotension, hepatosplenomegaly, lymphadenopathy, and muscular atrophy. Cardiac findings were non-specific, and those observed included cardiomegaly, diminished heart sounds, and a soft, ejection-type systolic murmur.

None of the laboratory findings are specific. However, certain laboratory findings may suggest the disease. Findings commonly observed were anemia, proteinuria, and increased sedimentation rate. Serum and urine electrophoretic patterns were extremely variable and only helpful as confirmatory evidence when myeloma proteins were present. Chest roentgenograms in all patients showed cardiomegaly and pleural effusions at some point in their clinical course. (Figure 5) In one patient (Case #3)

a chest roentgenogram showed bilateral pulmonary infiltrates which proved to be amyloid deposits at biopsy. (Figure 2) The electrocardiograms of all patients showed low voltage in the limb leads. Other frequent findings were left axis deviation, premature ventricular contractions, intraventricular conduction defects, second degree atrio-ventricular block, and patterns of myocardial infarction. (Figures 1, 4)

Since clinical and laboratory findings are non-specific, the diagnosis must be confirmed indirectly by demonstrating extra-cardiac deposits of amyloid. This is best accomplished by a gingival or rectal biopsy, although other organs may be utilized. In over 90 percent of the instances a positive gingival biopsy (Figure 3) is associated with cardiac amyloidosis whereas an 85 percent association is found with a positive rectal biopsy.[14-19] Cardiac needle biopsies are unjustifiable in suspected cases of amyloidosis. Not only is the risk considerable, but focal amyloid deposits may be missed.[20, 21] Besides biopsy procedures, a Congo Red test will indicate the presence of systemic amyloidosis if there is 20 percent or less serum retention of the injected dye (that is, 80 percent or more extraction).[10] False positive results rarely, if ever occur if 80 percent of the dye has been extracted from the serum at the end of one hour. Unfortunately, significant amyloid deposits may be present with a negative test.

Cardiac amyloidosis must be considered in the differential diagnosis of any patient with congestive heart failure of unknown cause. The following criteria are suggested to establish the antemortem diagnosis of cardiac amyloidosis: (1) congestive heart failure of obscure origin; (2) cardiomegaly; (3) low voltage electrocardiogram; and (4) positive extra-cardiac biopsy for amyloidosis.

Treatment and Prognosis

In patients with cardiac amyloidosis death almost always supervenes within a few months after the onset of congestive heart failure.[1-7] Only two of our patients (Cases #5 and #7) survived more than five months after onset of congestive heart failure. Routine use of digitalis and thiazide diuretics was ineffective in controlling congestive heart failure in our patients. Prednisone and mercurial diuretics were of variable and brief benefit, but ethacrynic acid (Edecrin^{R}) and furosemide (Lasix^{R}) were the only diuretic agents of real value. Digitalis, to which amyloid hearts are extremely sensitive, must be administered carefully.[6] Gastrointestinal manifestations in Case #1 and second degree atrio-ventricular block in Case #4 were thought to be due to digitalis intoxication.

Although animal experiments have demonstrated that amyloid deposits can be absorbed, no satisfactory agent has been found to cause reabsorption of amyloid in humans.[22] Secondary amyloidosis, however, may regress if the predisposing disease is eradicated.[23, 24]

Agents which have been used and found to be ineffective in the treatment of amyloidosis include liver extract, ascorbic acid, and uracil mustard.[10,25,26] Administration of cyclophosphamide (Cytoxan^{R}) and chloroquine were without benefit in Case #1 and Case #6 respectively. Adrenocorticosteroids have been of no proven benefit. Some investigators have even reported that steroids accelerate amyloid production.[27-29] Although prednisone produced temporary diuresis in Cases #4 and #6, it failed to prolong survival or cause amyloid reabsorption.

Melphalan (Alkeran^{R}), an alkylating agent, has been therapeutically beneficial in the treatment of multiple myeloma.[30] There is a published report of the use of melphalan in the treatment of one patient with multiple myeloma and amyloidosis.[31] It failed to prevent a rapid downhill course resulting in heart failure, azotemia, anemia, and death. This suggested the possibility that amyloidosis complicating multiple myeloma may be a contraindication to the use of melphalan. Three of our patients (Cases #4, 5, and 7) were treated with melphalan. Case #4 received a four-day course while Case #7 received two four-day courses. No definite beneficial effect was observed in these two patients, although Case #7 survived one year after the onset of congestive heart failure. Case #5 has, however, been maintained on melphalan (0.15mg./Kg. on alternating days) for 24 months. During the six months prior to melphalan therapy, this patient had developed progressive congestive heart failure, macroglossia, and asthenia. Since the initiation of melphalan therapy, there has

been no further enlargement of the tongue. Congestive heart failure is being well-controlled with digitalis and occasional furosemide (Lasix[R]) or mercurial diuretics. The chest roentgenogram, serum electrophoresis, and bone survey are now normal. Weight loss and asthenia are no longer present, and the patient is presently active and ambulatory.

Whether or not amyloid reabsorption has occurred in Case #5 as a result of melphalan therapy is impossible to determine. Since the tongue size has not appreciably changed, melphalan may have retarded deposition rather than caused reabsorption of amyloid. This beneficial response is probably due to control of multiple myeloma, the patient's primary disease, rather than control of amyloidosis per se. Whether or not melphalan can produce a similar response in non-myelomatous types of amyloid awaits future trial.

Summary

Seven patients with cardiac amyloidosis have been presented. The following criteria are suggested to establish the antemortem diagnosis: (1) congestive heart failure of obscure origin; (2) cardiomegaly; (3) low voltage electrocardiogram; and (4) positive extra-cardiac biopsy for amyloid. Once congestive heart failure has occurred, life expectancy is only a few months unless potent diuretics are administered. Although no therapy is known which reduces amyloid deposits, melphalan (Alkeran[R]) administration in one patient has apparently retarded amyloid deposition and produced a long survival period.

References

1. Mathews, W. H.: Primary Systemic Amyloidosis. *Am. J. Med. Sci.* 228:317-333, 1954.
2. Buchem, F. S. P.: Cardiac Amyloidosis. *Acta Cardio.* 21:367-384, 1966.
3. Eisen, H. N.: Primary Systemic Amyloidosis. *Am. J. Med.* 1:144-160, 1946.
4. Eliot, R. S., McGee, H. J., and Blount, Jr., S. G.: Cardiac Amyloidosis. *Circ.* 23:613-622, 1961.
5. Farrokh, A., Walsh, T. J., and Massie. E.: Amyloid Heart Disease. *Am. J. Cardiol.* 13:750-756, 1964.
6. Cassidy, J. T.: Cardiac Amyloidosis. *Ann. Int. Med.* 55:989-994, 1961.
7. Mulligan, R. M.: Amyloidosis of the Heart. *Arch. Path.* 65:615-630, 1958.
8. Reimann, H. A., Koucky, R. E., and Eklund, C. M.: Primary Amyloidosis Limited to Tissue of Mesodermal Origin. *Amer. J. Path.* 11:977-988, 1935.
9. Briggs, G. W.: Amyloidosis. *Ann. Int. Med.* 55:943-957, 1961.
10. Cohen, A. S.: Amyloidosis: II. *N. E. J. M.* 277:628-638, 1967.
11. Rukavina, J. G., Block, W. D., Jackson, C. E., Falls, H. F., Carey, J. H., and Curtis, A. C.: Primary Systemic Amyloidosis: A Review and an Experimental, Genetic, and Clinical Study of 29 Cases with Particular Emphasis on the Familial Form. *Med.* 35:329-334, 1956.
12. Buerger, L., and Braunstein, H.: Senile Cardiac Amyloidosis. *Am. J. Med.* 28:357-367, 1960.
13. Pomerance, A.: Senile Cardiac Amyloidosis. *Brit. Hrt. J.* 27:711-718, 1965.
14. Trieger, N., Cohen, A. S., and Calkins, E.: Gingival Biopsy as a Diagnostic Aid in Amyloid Disease. *Arch. Oral Biol.* 1:187-192, 1960.
15. Ensign, W. G.: Macroglossia as a Manifestation of Primary Systemic Amyloidosis. *J.A.M.A.* 149:136-138, 1952.
16. Dahlin, D. C.: Secondary Amyloidosis, *Ann. Int. Med.* 31: 105-119, 1948.
17. Blum, A., and Sohar, E.: The Diagnosis of Amyloidosis. *Lancet* 1:721-723, 1962.
18. Kyle, R. A., Spencer, R. J., and Dahlin, D. C.: Value of Rectal Biopsy in the Diagnosis of Primary Systemic Amyloidosis. *Am. J. Med. Sci.* 251:501-506, 1966.
19. Koletsky, S., and Stecher, R. M.: Primary Systemic Amyloidosis: Involvement of Cardiac Valves, Joints and Bones, With Pathologic Fracture of the Femur. *Arch. Path.* 27:267-288, 1939.
20. Calkins, E., and Cohen, A. S.: Diagnosis of Amyloidosis. *Bull. Rheum. Dis.* 10:215-218, 1960.
21. Jones, R. S., and Frazier, D. B.: Primary Cardiovascular Amyloidosis. *Arch. Path.* 50:366-384, 1950.
22. Richter, G. W.: Resorption of Amyloid Under Experimental Conditions. *Amer. J. Path.* 30:239-261, 1954.
23. Rosenblatt, M.D.: Recovery From Generalized Amyloidosis Secondary to Pulmonary Tuberculosis. *Arch. Int. Med.* 57:562-565, 1936.
24. Walker, G. F.: Case of Recovery from Amyloid Disease. *Lancet* 2:120, 1928.
25. Cohen, S.: Amyloidosis Complicating Tuberculosis—Diagnosis, Prognosis, and Treatment. *Ann. Int. Med.* 19:990-1002, 1943.
26. Goldberg, A., Brodsky, I., and McCarty, D.: Multiple Myeloma with Paramyloidosis Presenting as Rheumatoid Disease. *Am. J. Med.* 37:653-658, 1964.
27. Cohen, A. S., Calkins, E., and Franklin, M. P.: Studies in Experimental Amyloidosis. III: Effect of Cortisone Administration on Incidence of Casein-Induced Amyloidosis in Rabbit. *Arch. Int. Med.* 110:569-573, 1962.
28. Maxwell, M. H., Adams, O. A., and Goldman, R.: Corticosteroid Therapy of Amyloid Nephrotic Syndrome. *Ann. Int. Med.* 60:539-555, 1964.
29. Telium, G.: Cortisone-Ascorbic Acid Interaction and Pathogenesis of Amyloidosis: Mechanism of Action of Cortisone on Mesenchymal Tissue. *Ann. Rheumat. Dis.* 11:119-136, 1952.
30. Alkeran and Multiple Myeloma, *Med. Lett. Drugs Ther.* 8:32, 1966.
31. Waldenstrom, J.: Melphalan Therapy in Myelomatosis, *Brit. Med. J.* 1:859-865, 1964.

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Complications of Hypodermoclysis (Re-emphasis with a Case Presentation)†

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Hypodermoclysis is still being used as a form of parenteral therapy. Its complications have been noted in a number of patients seen at Children's Hospital recently. This form of therapy should cease in pediatrics.

FOUR children with dehydration and/or shock who had previously received hypodermoclysis were admitted to the Children's Hospital, Louisville, Kentucky, between November 1965 and February 1966. Each patient was referred from a small community hospital because of the inability of the attending physicians to correct the fluid and electrolyte imbalance. All of the patients had edematous lower extremities, three had marked swelling of the thighs and scrotal areas, and two had generalized edema. Despite immediate intravenous fluid therapy, three children did not void for eight to 12 hours and one child for 18 hours. It was obvious that the hypodermoclysis had become a more severe problem than the diarrhea it was intended to correct.

The purpose of this paper is to report one of these cases to re-emphasize the limitations and serious potential complications of this therapy.

Report of a Case

Six days prior to hospital admission, a five-month-old white female was admitted to a small community hospital in a moribund, cyanotic state following aspiration of a feeding. Respiration was established after suctioning and positive pressure oxygen. A roentgenogram revealed atelectasis of the right upper lobe and infiltrates of the right middle and lower lobes. Chloromycetin and penicillin were administered, but the child failed to improve. Because of persistent anorexia she was given unspecified amounts of normal saline and five percent glucose by hypodermoclysis. After three days of this therapy the infant developed edema and oliguria and was transferred to Children's Hospital.

Physical examination on admission revealed an edematous, dusky, and lethargic infant. The temperature was 97°F. (Rectal), pulse was 160, respirations were 50, and blood pressure 45 mm Hg (Flush Technique).

The child weighed 13 pounds, four ounces. The anterior fontanelle was soft, the lips moist, and the face was swollen. Examination of the chest was consistent with right upper lobe collapse and a grade II/VI innocent systolic murmur was noted over the precordium. Except for the liver, which was three centimeters below the right costal margin, there was no organomegaly. A 1 plus/4 plus pitting edema of the upper extremities and a 3 plus/4 plus pitting edema of the lower extremities was present. There were multiple puncture marks on the anterior aspects of both thighs.

Admission laboratory data included a hemoglobin level of 12 gm/100 cc; hematocrit, 37 percent; and WBC count, 12,050, with 70 percent polys. The urine specimen produced 18 hours after admission had a specific gravity of 1.02, 1 plus protein, negative acetone and sugar, and 25-30 WBC per high power field. The BUN was 9.2 mg/100 cc, total protein 5 gm/100 cc (Albumin 2.3 gm/100 cc and Globulin 2.7 gm/100 cc), and the electrolytes were within normal limits.

The child was given intravenous hydrating solution (1500 cc/M^2) and I.M. Prostaphlin. Despite this therapy, only 15 cc of urine were produced in the first 18 hours. Hypotension and hypothermia persisted until diuresis began 48 hours after admission. By the fourth hospital day a 1¾ pound weight loss had occurred. On the twelfth day the total protein had increased to 5.9 gm/100 cc with an al-

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bumin of 3.3 gm/100 cc and globulin of 2.6 gm/100 cc. A urinalysis at this time was normal, and the urine culture collected the day of admission had not shown any significant growth.

The pitting edema did not completely disappear for two weeks and it was a month before the RUL atelectasis resolved. Laboratory examinations including cholesterol, SGOT, sweat chloride, serum glucose, and VDRL were normal. Analyses of the spinal fluid and chromosomes were also normal.

Comment

This case illustrates some of the more serious complications of hypodermoclysis: hypotension (shock); hypothermia; oliguria; and anuria.[1] The dangers of subcutaneous fluid administration last appeared prominently in the literature in 1952.[1] Just two years previously Gardner and Murphy[2] introduced the scalp vein set for intravenous fluid therapy in infants and children. This development has obviated the use of hypodermoclysis as a form of therapy and has no doubt been responsible for saving thousands of children. Unfortunately, our recent experience has made it clear that a number of physicians may still use hypodermoclysis therapy.

The basic difficulty with subcutaneous fluid therapy is that the fluid must equilibrate with the intravascular compartment before absorption into the circulation can occur.[3] Consequently, when hypotonic or hypertonic solutions are used the absorption rate may be too rapid, too slow, or nil. In fact, precious intravascular fluids may be drawn out of the circulation at the worst possible time.[1] Controlled animal[3, 4] and human[1, 3] studies have confirmed the primary problems involved.

A recent commentary[5] in *Clinical Pediatrics* has reiterated the inadvisability of subcutaneous therapy. Their three cases had hypernatremia and one child eventually died. At Children's Hospital in Louisville about two infants per year arrive at our emergency room DOA—their only parenteral fluid source having been via the subcutaneous route. This type of therapy is not an insignificant problem, and it should behoove those using it to re-evaluate the serious disadvantages.

Summary

Hypodermoclysis therapy is still being used sporadically to treat fluid and electrolyte abnormalities. The results of such therapy may be the reversal of that desired. In view of the general availability of scalp vein sets, treatment by hypodermoclysis is rarely necessary or effective.

References

1. Abbot, W. E., Levey, S., Foreman, R. C., Krieger, H., Holden, W. D.: The Danger of Administering Parenteral Fluids by Hypodermoclysis, *Surgery* 32:305-315, (August) 1952.
2. Gardner, L. T., and Murphy, J. T.: New Needle for Pediatric Scalp Vein Infusions, *Am J Dis Child* 80:303-304, (August) 1950.
3. Webb, W. R., Lemmer, R. A., and Elman, R.: Absorption Rates, Electrolyte and Volume Changes Following Subcutaneous and Intraperitoneal Injections Containing Salt, Glucose, and Amino Acids, *Surg Gynec and Obst* 91:265,1950.
4. Danowski, T. S., Winkler, A. W., and Elkinton, J. R.: Biochemical and Hemodynamic Changes Following the Subcutaneous Injection of Glucose Solution. *J Clin Invest* 26:887, 1947.
5. Commentary: Stickler, Gunnar, B. (Warning Regarding Administration of Fluids). *Clin Pediat* 6:323, June, 1967.

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SPECIAL ARTICLES

Med-Ed: Part Two

NINE presentations were made at the second biennial KMA Conference on Medical Education, January 27, 1968, at Park Mammoth, Kentucky. Four of these presentations which concerned the topic of "The Mechanics and Philosophy of Basic Sciences Curriculum in Teaching and Research" were published in the June issue of *The Journal*.

To conclude the two-part series this month, *The Journal* has published below the five articles representing the portion of the discussion which pertained to the topic of "The Impact of Socio-Economic Changes on Medicine."

The Impact of Socio-Economic Changes on Medicine

"From the Citizen's Point of View"

LOUIS WOZAR*

Dayton, Ohio

AS I approach my assignment here today, I am a bit fearful and a bit awestricken.

I am frightened because I am the only layman on the program and I wonder if it is safe to say some of the things which I have on my mind.

I stand in awe at the combined talent which is assembled here—talent dedicated to the healing and well-being of a society which, in many ways, is sick. Or so it seems to me.

I want to say at the outset that I am an average layman who knows little or nothing about professional medicine. It has been my privilege to work on several state and local committees whose purpose it was to delve into the needs of various health programs. I have also learned a few things in my capacity as chairman of a number of health planning councils.

But, I am not a medical man and do not plan to become one. I am an industrialist, whose chief problems concern the manufacturing and selling of water-handling appliances. We wish we could operate our business with less government interference. And, we wish it were possible to make a little money doing it.

These are problems which also relate to your profession—so perhaps we can talk together from several common bases.

We have learned, through comprehensive employee relations programs in our plants, that the average person today is much more sophisticated than 10 or 15 years ago. We must constantly re-evaluate our approaches to him, particularly in the ways in which we try to help him meet his changing needs and goals in life.

I believe I see a parallel here in medicine.

The people who come to you are more sophisticated. This is due to the fact that growing percentages of the public have graduated from high school and college. There also has been the tremendous impact of magazines, movies, radio and television. And, as you know, this is an age of self-help courses—and many adults are continuing their educations.

The more I think about it, the more convinced I am that there is a close relationship between my problems and yours.

In the olden days, when paternalism was the core of an employee relations program, we could say, "Now, now—everything will be all right. Just be grateful you have a job—and get back to the work bench."

In the olden days in medicine, I presume you dealt mostly with contagious diseases. I expect, in many cases, about all you could do was place a cooling hand on a fevered brow and assure the patient of your personal interest and concern. You told him, "Now, now, old boy, Doc is here, everything is going to be all right—just take these pills." He had confi-

Chairman of the Advisory Council to the Ohio Valley Regional Medical Program

dence in you; he did what you told him; and usually everything came out all right.

Today. you probably deal mostly with chronic diseases, and your patients talk back to you when your advice does not coincide with the cures set forth in last month's *Readers Digest.*

The chances are that your chronic disease patient, Joe Smith, will require a complex and specialized health program designed to cure his reoccuring headache. This headache may be the result of something which happened in one of my plants: The poor fellow might not have been able to make it as a foreman in our assembly division, so we had to put him back in the tool crib with iron bars around him. Just what is the relationship between Joe's nagging attitude concerning his demotion and the continuing headache?

I am thinking here of the need for the physician to understand this man in relation to his job, security, family and community relationships. Otherwise, we are perhaps treating unrealistically. Is it right to tell Joe to give up smoking, cut out drinking, forget bowling, cancel the weekly poker game, abstain from sex, but above all, Joe, learn how to relax?

I want to say immediately that I may be exaggerating Joe's problem—just to make a point. Moreover, I want to acknowledge that it is just as much *our* responsibility as *yours* to come up with a solution.

The question is: How can we *best work together* to accomplish this?

I propose to suggest an answer a little later—but, for the moment, permit me to mention other mutual problems about which we should concern ourselves.

As you may know, labor unions today are attempting to develop early retirement plans for millions of employees. Some of these people will quit work at 55. And since they will live 20 years longer (thanks to the medical profession), we are going to have problems a-plenty.

What chronic diseases, real and imaginary—what chronic diseases, mental and physical—will result from greater idleness and greater life expectancy?

I realize that the government has some ideas in this field, but what is it that the individual local community can do? This is something which requires study, planning and cooperation. It requires the active participation of the medical profession, along with many other community groups.

Another important effect of the aging of the population and the chronic disease era has had significant impact on the organization of medicine, medical education and the health care delivery system. The older people need a greater variety of services—often at a variety of locations—requiring a variety of facilities and equipment, and the services of many professional and sub-professional specialists.

This fact alone has put a major strain on the health care delivery system and raises basic questions as to future planning and organization of medical care services.

How should it be organized and how do we assure that the individual won't get lost while going through the system? This is assuming the individual is knowledgeable enough to know where to enter the system and what financial support is available if needed, and how to arrange for it. There are major questions here as to convenience, and decisions and compromises should be reached as to whose convenience is overriding in particular health programs.

It is my feeling that in the interest of conserving manpower, money and materials, there should be greater concentration and coordination in health care services. All things being equal, the convenience of the physician should be overriding, as we cannot afford the luxury of having professional people spending half their day running around town from one office or facility to another. Actually, concentrations of medical services tend to be convenient not only to physicians, but to patients in terms of quick referrals, and immediate provision of multiple services. As the provision of a greater number of services requires the team approach, concentrations are a necessity.

This need for a variety of services by the aged poses a unique challenge for the physician, and other providers of services, to assure both comprehensiveness and continuity of care through organization and coordination.

The basic questions are: How can health service be organized to meet the numerous needs of a single individual without losing sight of the individual himself? without losing continuity? without making the individual feel like a number?

As for the hospital, it has grown into an institution where one goes, not to die, but to receive major preventive, diagnostic treatment and rehabilitative services.

Obviously, an institution as complex as a hospital must have rules and regulations, otherwise, there would be complete anarchy and confusion. Yet, we must be careful not to develop procedures with more of an eye toward easing administration than giving the patient the care he needs.

Patients wonder why there is always a piece of paper between them and the health personnel. Personnel are becoming so procedural oriented—like the links in a chain and like an assembly line in industry—to the point where the individual patient may well wonder whether his own unique needs are being slurred over, neglected or squelched.

Obviously there must be compromises between the needs of the institutional system and the needs of the patient in order to get the major job done. I think this is a *major continuous* challenge to us to keep these interests in balance.

Another characteristic of our modern society has been the rapid growth of urbanization. Urban living tends to change attitudes, and add to the awareness of people in their use of health services. Urban people are more prone to turn to a variety of sources for health care. The mobility and access of urban residents make it possible for them to seek health services more frequently than their rural neighbors.

Larger concentrations of people provide the opportunity for constructing larger and more economical units for health care, with the greater assurance of high utilization and effective administration. The

same concentration of people provides a manpower base for meeting health personnel needs.

Yet, despite these potential advantages, the resources of even urban areas are not sufficient to support the concept that each hospital should be all things to all people. In the interest of maximizing use of existing human, financial and physical resources, urban areas must concentrate on coordination of facilities and services if high quality comprehensive and efficient programs of health care are to be maintained.

Herein lies a challenge to the medical profession to actively participate in planning at the institutional level and in response to their evaluation of overall community need. Actually, there is evidence that the medical profession is becoming more knowledgeable and understanding of the complexities of health care planning, and in community after community they are playing their vital role in planning. It is obvious to me that we cannot plan realistically in the health field without this help. The community is fortunate which has the active participation of the medical profession in such planning.

Although our society historically always has been mobile, the 1960 census indicates that approximately one-fifth of the population moves each year.

This presents a problem in terms of continuity of care of the individual with his personal physician. Consider the situation of the millions who break established relationships with a known health care system and move to new communities. These families must establish new relationships to meet their comprehensive health care needs. This is a two way responsibility—one for the providers of service—physicians, health facilities and organizations—to make entry into the system logical and easy—and the other for the family to seek it.

This mobility places both the physician and patient in a different setting. The patient's history rests on what he can, or cares to recall. This can be contrasted to the situation decades ago, when a practitioner might take care of a family for many years and have sensitivity to the hereditary makeup and individual life adjustment of each member of the family.

Just as we, in industry, have a communications problem with the employees, you have one with your patients. I have heard physicians complain of the number of patients they see in their offices with minor complaints edging on the neurotic—and, indeed, this can be proven statistically. I also hear from patients of their feeling of guilt about taking up the physician's valuable time for complaints when it turns out there was no basic reason for concern.

On the other hand, I have often sympathized with physicians who have seen patients arrive at their offices too late after ignoring symptoms for months. This often leads to an unnecessary, preventable death.

Identification of the problem is simple .How do we keep the patient with minor unfounded complaints out of the office, in the face of major public health education to see the physician at the first symptom, so that modern medical advances can be brought to bear? Resolution is more difficult. Are we talking about more sophisticated self diagnosis—and its related dangers—or what? What are our goals? What can the community do to help you with this problem? What can you do to help yourselves?

Up to this point I have tried to point to a few community problems related to health care. There are others which could have been mentioned. However, in the time remaining I should like to discuss briefly some aspects of federal legislation and other outside factors which are necessarily a part of this discussion.

If the physician is confused, you can imagine the state of mind of the average layman. The health field and current legislation represents a field of cobwebs. It is apparent that current health legislation has created a wealth of opportunities for planning and implementation, yet at the same time has created a complicated, fragmented, overlapping, duplicating maze.

There is a movement in areawide hospital planning. Yet before we can formalize our plans, the rules of the game are changed. While many hospital planners worry about *bureaucratic administrative control* in hospital planning, Congress outdid the bureaucrats by *legislating* control and stipulating exactly what a planning council should do. (I am referring to comprehensive areawide health planning). In effect, they legislated community action without knowing how communities acted. They dictated that all interested parties in health crawl in bed together, without consideration of variation of interest, talents and approach. To many laymen this presents an impossible situation, since many of us are involved in a multiple number of agencies concerned with financing, planning, and direct provision of services. As a layman I am totally confused as to how they could expect the voluntary private sector to be responsible for air and water pollution which has historically been a question of legislative and judicial control.

I preach for the voluntary method, yet I hear more about sanctions.

I have experienced a growth of understanding about planning in the health field, yet suddenly note that the hospital planner's recommendations are to be reviewed by regional bodies of physical planners concerned with land usage and water quality control. I am referring here to Model Cities Legislation P. L. 89-754. These bodies will review all federal programs except education. Yet I understand that impending legislation will create a supra planning body which will approve all federal monies including education. Detailed regulations about existing review by land usage regional bodies have not been written and there is equal confusion by all parties as to who should do what, when and how.

The regional medical programs in heart disease, cancer and stroke have considerable amounts of money for planning and implementation, yet no clear lines have been established as to their specific interests and how they relate to other agencies.

New advisory committees to the state have been appointed to establish health priorities and assist in

appropriations, yet the maze of regulations and lack of data are overpowering.

The availability of money and aggressive stature of the government put many of us in bizarre positions. I am on the Executive Committee of the Hospital Planning Council in Dayton and was surprised to be requested informally by representatives of the federal government to put in for supplemental monies for planning in Mental Health and Mental Retardation on a demonstration basis to prove that hospital planning councils can plan effectively in these areas. As it was, there was no agency actively involved in this area, so we proceeded.

The matter of financing is important. Much of the health legislation calls for matching monies, yet I, as a layman, find a dearth of understanding in state and federal committees and among other interested parties as to how monies are raised locally and what problems exist. As a practical businessman I often shudder.

Confusion persists in terms of relationships. The Hospital Planning Council in Dayton relates to the Department of Health on some matters, The Department of Mental Hygiene and Correction on others. One of the Hospital Planning Council's committees doubles for the Vocational Rehabilitation State Manpower Committee. The Hospital Planning Council has a relationship with the regional planners which neither of us understands. New legislation has created both county mental health and mental retardation boards, yet their role and relationship with the ongoing program of the Hospital Planning Council is undetermined.

I must stop—or I soon will be one of your patients. It is difficult to discuss this legislative mess without developing heart failure.

Yet, being something of an optimist, I believe we *can* find a solution.

What we need, and must have, is more community-wide planning and more community-wide action with less government entanglement.

The best approach, it seems to me, is first, public education. After we have acquainted the public with some of the problems, we should better be able to attract community leaders—in depth—who will help to plan and act on a concentrated and continuing basis. And, if we can be assured of the full cooperation of the medical profession and the lay people in health services, we cannot fail to make significant strides in the right direction.

In situations where you can see the problems more clearly than we laymen, call them to our attention. When we see community health needs which we believe are not being met, we will call them to your attention.

It will not be easy. But, cooperation, planning and timely voluntary action will do it.

Thanks for listening. And thank you most kindly for inviting me to take part in your deliberations.

"The University and Community Health Services"

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Lexington

THE foremost external force affecting medical education is the now accepted concept that access to good health care is a human right. It is believed by many that this concept demands a revision in the traditional methods of delivery of health care. If medical schools are responsible for defining the kinds of health personnel needed, the kind of education they will require, and how they are to be most effectively used, then our schools must teach medical students, interns, and residents more about the delivery of comprehensive health care. As a result, even greater attention must be given to the behavioral and social sciences and to community health in the education of the modern doctor.

Recent congressional legislation such as that establishing the Regional Medical Programs has placed new service demands on medical education. As these new demands are met, academic and scientific excellence must be maintained. We are all aware that the American medical scene is characterized by a striking unevenness, with the most extraordinary patient care available in the world at one end of the spectrum, and poor patient care at the other. What is needed, we are told, is an upgrading of the quality of patient care for the large segments of the population that do not now have access to good health care. The key question is: can this upgrading be accomplished without detracting from the pursuit of excellence to which university medical centers must be committed?

At the recent annual meeting of the Association of American Medical Colleges—a group composed of medical school deans, medical educators, and administrators of teaching hospitals—a major single theme ran through many of the sessions: the universities must do more to bring medical care to all of the people. They must do this, it was said, not only by producing more physicians and other health professionals, but by participating actively in expanding and in improving systems for the delivery and financing of health services.

The just published report of the National Advisory Commission on Health Manpower[1] states in its introduction that: "There is a crisis in American health care." . . . "The crisis, however, is not simply one of numbers" . . . "It is true that substantially increased numbers of health personnel will be needed over time" . . . but "unless we improve the system through which health care is provided, care will continue to become less satisfactory even though there

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are massive increases in costs and in numbers of health personnel." The report further characterizes medical care in the United States as being a "collection of bits and pieces (with overlapping, duplication, great gaps, high costs, and wasted effort)" rather than "an integrated system in which needs and efforts are closely related." It is past time, the Commission insists, for university medical centers to take a look at the system.

Medical schools and their affiliated university teaching hospitals have been criticized for their alleged failure to be concerned with the medical problems of the immediate urban communities in which they are located, sheltering, as it were, their investigators and their students in some ivory tower remote from the realities of medical care. Increasingly, university medical centers are challenged to take an active part in providing medical care for economically depressed, medically deprived communities by engaging directly in the practice of medicine, not only within their own hospital walls, but outside of those walls by creating satellite clinics, assuring transportation for medical visits, and developing programs in rehabilitation, preventive medicine and all those aspects of medicine grouped under the label of "Comprehensive Medical Care".

Some of this may sound familiar to you. In the past, the practicing physician has been the "whipping boy" of political spokesmen, social reformers, medical administrators, and others too often unfamiliar through any formal experience with the problems of community medical practice. Physicians accused of failing in their responsibility to provide total care to the members of their communities may derive some wry satisfaction from observing the discomfort of their colleagues in the university teaching centers now found guilty of the same charge[2].

The growing conviction of the American public that the right to health care is an individual right which should be available to all has been expressed in recent years by a growing amount of legislation designed to bring the fruits of medical research and the benefits of medical care to all of our citizens. Of the 25,566 bills considered by the 89th Congress, 1,600 affected medical care. Just as the practices of physicians have been influenced by Medicare-Medicaid legislation, so will the activities of the universities be influenced by comprehensive health planning legislation, and the implementation of Regional Medical Programs. It is my conviction that the universities must heed this demand for service, but not let it jeopardize their roles in teaching and research. Rather, universities must use this opportunity for service to improve and strengthen their teaching and research programs.

Emphasis on the community seems to be the new dimension. There is an emerging conviction among leading medical schools and their parent universities that university medical education is at the threshold of a new phase of social responsibility. The wide disparities which exist between the best that is known and practiced in medicine and the adequacy of medical services actually obtainable by a large part of our population, particularly low-income families, have brought to the fore this new and further role for the university in medicine and health. In addition to teaching, research, and patient care, university medical centers have been asked to take the lead in the identification and solution of the complex problems of the nation's system of health services. The university setting should provide opportunities for medical scholars to work with non-medical faculty in fields bearing crucially on these problems—economics and sociology for instance—and in the design of experiments and demonstrations in improved patterns and arrangements for providing health care. Along with other universities, the University of Kentucky must participate in the development of broadbased, collaborative programs to gain insights into how basic factors that shape medical and health services—educational, professional, institutional, social, and economic—can be modified to produce patterns or systems that will make the best use of available resources and improve the chances of individuals and their families to maintain their health at optimum levels.

Historically, medical centers have performed their duty by operating good hospitals, clinics, and outpatient departments, while state and local governments, through health departments, were responsible for taking care of those health problems found in the community outside of the walls of the medical center which were not handled by the private sector of medicine. With few exceptions, the result of this approach has been far from desirable. In terms of education, one of the major criticisms of the lack of university participation in community medical problems is that it has disregarded the need of the medical school to provide some kind of educational experience for the medical student and trainee in the problems of furnishing comprehensive care of the type which it is hoped he will eventually render. As you all know, the College of Medicine of the University of Kentucky has dealt with this criticism in part through the development of community medicine clerkships which provide opportunities for our students to study health needs throughout the state and to work with practicing physicians seeking to meet these needs. This experience in community medicine on the part of our faculty and students should prepare us to work more effectively with other programs being developed within the state. Two of these are the Ohio Valley Regional Medical Program and the Southeastern Kentucky Regional Health Demonstration Project supported by the Appalachian Regional Development Act. A third, Comprehensive Health Care Planning, will soon be initiated.

Nationally, the Regional Medical Programs must aim for the inclusion of a "significant portion" of the nation's total health resources if the law's intent is to be met; this means involvement with almost 100 medical schools and their affiliated teaching hospitals, a sizable proportion of the total of 7,000 hospitals, involvement of some 288,000 physicians active in practice, 600,000 nurses, and a large number of other health personnel. The Ohio Valley Regional Medical Program will place demands on the Universities of Cincinnati, Louisville, and Kentucky for

expertise and leadership in expanding continuing education and in improving health services in community hospitals.

Lack of manpower to staff these vast new programs is an immediate problem. Other problems already emerging center on the need to "reach a consensus" in such areas as: (1) distributing those specialized facilities and manpower required to meet the needs of heart, cancer, and stroke patients at the most reasonable cost; (2) determining the character and conduct of continuing education programs that utilize the resources of professional organizations, university medical centers, and community hospitals; and (3) applying technological innovations, such as the use of centralized computer facilities for patient diagnosis and monitoring of physiologic function.

Obviously, solutions to these and all other problems generated by the Regional Medical Programs will require the good will and close cooperation of all physicians, be they in medical centers or in solo practice, and, indeed, of all health professionals.

Another program with similar requirements is the Regional Health Demonstration Project to be located in the southeastern corner of Kentucky, an 11-county area in the heart of Appalachia. The proposed project is designed to demonstrate a regional approach, on the basis of medical service areas, to the development and functioning of comprehensive health services. Responsibility for planning and implementation is to be exercised at the local level through area-wide health planning councils. Technical assistance to the planning councils and to the entire demonstration project will be provided by the University of Kentucky Medical Center, the State Department of Health, and the State Department of Mental Health, working in concert. Here, obviously, is a major community project which can be used as an instrument for teaching and research.

We at the College of Medicine must now consider the need for other community laboratories. You are probably familiar with what a number of schools have done to provide an educational experience for their students in furnishing comprehensive care. These may be classified in two categories: (1) the provision by the medical center of comprehensive care on a voluntary basis for a limited number of families in a selected geographic area; (2) the provision by the medical center of comprehensive care for the total population of a large geographic area in the city.

The family care programs which have been developed are extensions of the home care programs which have been carried out by some medical centers for a number of years. Once started, the family care program must be permanent, with the medical center assuming the obligation of looking after selected families and, in effect, replacing practicing family physicians. Individuals designing such programs have sought to include families from all economic levels, since programs carried out only in indigent populations do not provide a true picture of comprehensive medical care.

The development of comprehensive care programs to serve large urban areas has been made possible by the Office of Economic Opportunity, the so-called Poverty Program. Such programs have been developed by Tufts University in Boston, by two of the medical schools in Chicago, and one is now being developed in the Hough area of Cleveland. All of these programs are in deprived areas with few physicians. In such programs, it is obvious that patient care is the predominant activity and that teaching is secondary. No one can quarrel with the objective of bringing good medical care to these citizens, but the big, contemporary question is how much responsibility the university should assume for providing such care.

One of the recommendations of the Commission on Health Manpower reads as follows: "Programs for health care of the disadvantaged should be given highest priority and made available wherever needed.

"Innovations introduced experimentally for the care of the disadvantaged should be carefully examined for their applicability to the care of all persons. Conversely, programs for the care of the disadvantaged should incorporate elements from existing methods of medical care, wherever appropriate.

"Experimental programs to develop new methods of health care for the disadvantaged should be enlarged and should become the combined responsibility of physicians in private practice, universities, hospitals, voluntary agencies, and government at all levels."

The call for "combined responsibility" is basic, and deserving of emphasis. With this in mind, it is pertinent to quote from Resolution D of the KMA House of Delegates in September 1966:

1. "That KMA establish leadership in forward looking and imaginative planning for tomorrow's community medicine;
2. "The medical profession strive to identify with total medical care problems of society, to study and understand such problems, and assume leadership in formulation (with others) of solutions to these problems, recognizing the valid interest of both the public and the profession;
3. "KMA should provide a way for the maximum participation of its members, maximum flexibility in responding to the immediate and future problems in scientific, social and economic aspects of medical care, and encourage experimentation and innovations in medical care patterns;"

An *ad hoc* KMA study committee for improved community health has recommended that county medical societies be encouraged to establish their own committees to study local health problems and formulate solutions to them. It would be highly desirable for such committees to relate their efforts to comprehensive health planning at state level. We all seek the same goals, and it is clear that we are all caught up in the same revolution. The medical schools need the help, guidance, and wisdom of community physicians more than ever, and must be prepared to assist them in turn.

The revolution of which I spoke may bring an end to the era when a medical school's services were chiefly related to its teaching and research programs. We can look forward to a redefinition of the medical

center's role as government, industry, and the public ask that the excellence of the university hospital be made available to the total population. The same forces will surely redefine the role of the community hospital as well. I trust that we will all be equal to the challenge.

References

1. *Report of the National Advisory Commission on Health Manpower*, Vol. I, Nov. 1967, U.S. Government Printing Office.

2. Dawler, T.R., The role of the university medical center in the community., *BUMC Scope*, 1:2-5, Sept. 1967.

"The Impact of Socio-Economic Changes on Medical Education"

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Louisville

AT times it appears as if we in medical education believe that only advances in knowledge and technology should properly influence our educational efforts, and if there is to be an interaction between medical education and the social and economic realms, it should be only that which we ourselves permit and which we can directly control. However, I think it is true that the majority of us recognize that since medical education is a complex, human endeavor, it will not only produce changes in the social and economic fields, but changes in the socio-economic field will inevitably alter its character. Therefore, the educator must not only anticipate developments in science and technology and translate these developments into medical practice, but must also recognize and interpret the medical needs of our society, establish appropriate educational programs and assist in the development of effective means of coping with important social-medical problems as they evolve.

In considering the principal factors involved in the social and economic fields that will affect medical education in the near future, the recognition of the paradox existing in modern medicine will certainly be one of the most influential. This paradox refers to the tremendous advance in our knowledge and technology occurring at the same time that there has been a startling decrease in our progress in reducing disability and preventing disease and untimely death. We recognize that the progress in the bio-medical sciences has been the result of a generous investment of a significant proportion of our national resources. And yet there has been a relative failure to translate these advances for the benefit of our own society. On the other hand, other nations in the civilized world appear to have been more effective in this regard. Thus in 1959 the United States ranked 13th internationally in terms of the life expectancy of males; by 1965 we had fallen to the 22nd place. Our infant mortality which was 11th in 1959 has fallen to 18th. Curiously, this fall has coincided with an enormous expansion in our national medical research programs. As a result of this discrepancy between our success in research and our relative failure in the delivery, medical practice and our methods of delivering medical care have been scrutinized by different groups and organizations. They have noted that our medical programs have varied from the truly excellent to the very mediocre, from the very modern to the very regressive. And those of us who are familiar with medical practice have recognized the fundamental truth of some of these observations and not without some embarrassment.

The protests are becoming more shrill against the deficiencies in the implementation of modern medical advances and the faulty methods of delivering health services. There is increasing demand that more of the available health resources be diverted toward the improvement of our health care delivery. This view seems to be meeting with the approval not only of those outside of medicine but also of those in medicine. Consequently, medical schools must anticipate in the very near future the effects of the diversion of these resources from research in the basic and clinical sciences to programs aimed at the solution of medical manpower problems and problems associated with health delivery systems. If we can make the assumption that the percentage of money that will be available to medical schools in the future will increasingly reflect this change in the priorities of our society, then one can anticipate that there will be certain alterations in the character of our curriculum, in the flavor of our faculty, on the nature and number of our students, and on the ecology of our patient population. It is my intention this afternoon to look at some of these changes anticipated.

With regard to the curriculum: this is an area of my own special interest. I have discussed the changes I expect to see occur in the near future formally and informally on several occasions; I will not attempt to detail my view today. However, I do expect quite dramatic changes in the curriculum in the future, and we in Louisville have attempted to implement some of these changes.

The curriculum must be flexible enough to provide the student an opportunity to pursue his unique role in medicine while still exposing him to the core of knowledge necessary to the physician. All of us recognize the need for specialization and subspecialization, and anticipate that with the continued evolution of knowledge, there will be an increasing number of specialties. This certainly is an essential characteristic of a complex and a modern society, and it would be foolish to expect that our society in the future will need less specialization rather than more. But I would emphasize that as our medical knowledge becomes ever and ever more frag-

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mented and subspecialties arise in increasing number that there will be an increasing need for the individual trained in general medicine.

It is not my intention today to discuss the need for a comprehensive medical care program in the future or the wisdom of it. I certainly recognize the truth of the view that comprehensive medical care is delivered in our society today by a large number of physicians. However, the fact that comprehensive care does exist does not negate the need for the development in the medical curriculum of an organized, systematic approach to the education of the student in comprehensive medicine anymore than the need for an organized program in anatomy or pediatrics. That comprehensive care has been provided has not been so much the result of the educator's planning but probably more in spite of it. That comprehensive care is provided at all in our society today is a tribute to the wisdom of our former graduates who have recognized the existing need. However, because the comprehensive care programs developed are the results of individual or small group efforts, they are limited in scope and in their ability to experiment in the area and to devise new approaches. Because programs of comprehensive care have developed haphazardly, often without thorough planning and necessary organization, the programs tend to be spotty—excellent in some areas while in other areas they are quite poor and even non-existent. To say that comprehensive care does exist in many instances and therefore, medical schools are free of the obligation to organize and develop suitable models in the future fails to recognize the haphazard character of its development and the need for further research in the area. Our society has the right to request medical schools to bring their objectivity and their scientific methodology to the problems of medical delivery, and to insist that they offer their students an opportunity to obtain a well-roganized, well-developed, integrated approach to medical care. The curriculum of the future will of necessity be organized with the development of comprehensive care programs in mind for both the medical student and the house staff.

Another major area of concern confronting our society in an ever-widening circle is the increasing tendency toward the de-humanization of medicine in our curriculum. Although we recognize that the application of science in the medical disciplines has produced impressive advances in patient care, the mode and manner of that application which we refer to as the art of medicine has been sadly neglected. The crucial nature of the personal and intimate relationship that exists between the doctor and the patient must be re-discovered, studied systematically, and the knowledge and techniques made available to our students. For it is this so-called art of medicine which enables one physician to initiate a vigorous diagnostic program or therapeutic regimen that another equally well-trained physician is unable to establish. Moreover, this facility when absent will often encourage the patient to seek the services of a charlatan or a quack who consciously or unconsciously can minister to the human psychological needs of the patient. While it is to be emphasized that it is the application of scientific principles to the sick that is the proper aim of medicine, nevertheless it must be reemphasized that it is the art that enables us to relate well enough to apply those principles. Students should be encouraged in a modern curriculum to discover the art of medicine, to take cognizance of its existence, to develop and foster it into an effective means of bringing the patient to scientific medicine. Students must be allowed to discover that when the science is no longer availing, the art can continue to provide the patient with solace and consolation. A conscious effort must be made to restore humanism to the medical curriculum, and this should be done candidly, openly, and without embarrassment, recognizing that even science has its limitations and when science is unavailing the art will still remain.

Just as there will be significant alterations in our curricula, so there will be dramatic changes in our faculty. We have recognized that our medical schools in developing their necessary roles in research have often suppressed their vital roles in education and service. In most instances the trend has evolved gradually and unintentionally in response to the massive infusion of research funds and the support these funds have provided our schools and faculties. Over the years research has achieved a dominant place in our medical schools and education and service have become progressively de-emphasized.

This imbalance has imposed on our faculties the necessity of investing their time and energies in the pursuit of their research endeavors, for prestige has come to the researcher and promotions and tenure have been his rewards, while few rewards have accrued to the teacher and the clinician. As a consequence, we find that even a majority of our clinical faculty are often more comfortable in the laboratory than at the bedside. And with the passage of time our institutions have tended to resemble medical schools less and less and research institutes more and more.

That harmony which must exist between the goals of the medical school must be re-established, and I suspect that the diversion of resources from basic research to medical care endeavors will play a major role in that restoration. For just as financial resources have influenced the character of our faculty in the past so we can anticipate that these funds will affect their roles in the future.

It is to be expected that in the future our basic science colleagues will continue to play an essential role in medical education, but they will be called upon to make greater efforts in developing and teaching the relationships which exist between their own fields and the clinical sciences. It is to be hoped that more effective rapport could be developed with their clinical counterparts. Greater efforts to divert the abilities of these members of our faculty toward the solutions of important clinical problems will probably ensue, and interdisciplinary programs will become more necessary with the further evolution of knowledge. Toward this end it is reasonable to anticipate that the basic scientist will more often be found as a co-equal member in clinical departments pur-

suing cooperative efforts in clinical areas. A greater number of faculty will be devoted to teaching and service, and it is reasonable to assume that they will occupy a co-equal status with that of the researcher; a new breed of faculty will appear in medical schools who will be more interested, more adept, and more active in the study and pursuit of medical care.

As our population continues to increase in size and affluence and as our social philosophy evolves, the patient population will increase in magnitude. Moreover, medical care will probably be less episodic in character and more continuing and preventive and therefore, more demanding of time. As a result of these changes, there will be a need for a greater number of physicians and consequently, a greater number of students. One can foresee that the number of medical schools will increase, and those already in existence will be pressed to educate more physicians. There will be an increased need for vigilance lest the quality of our students deteriorate. If we are to attract a greater number and more qualified students into medicine, our current recruitment methods will have to be scrutinized and new techniques developed. This will be particularly more urgent as the increased governmental intervention in medicine tends to make medicine less attractive and as new areas of science and engineeering tend to become more glamorous. We will eventually have to develop the view that the total number of medical school applicants consitutes an essential national resource rather than local pools of talent. Methods will need to be developed whereby medical schools will have access to potentially all qualified applicants, and all applicants will have access to all medical schools. Some mechanism perhaps similar to the internship matching program should be developed in the future. It will be only through the development of such new techniques that the best qualified applicants will be assured of medical school admission, and medical schools will be able to get the best qualified talent available. Moreover, because of the heavy investment of time, energy, and money that goes into each student's education, the demands to reduce attrition will become more insistent. This will require improved methods of screening our applicants, detailed scrutiny of our curriculum and our educational techniques, and modification of the faculty attitudes toward the student. It appears incongruous, but nevertheless true, that medical schools will have to re-discover the essential role of the student in the institution.

As medicine continues to become more complex and members of our society better informed, the demand for effective continuing education programs will become even more insistent than they are today. I think most of us recognize that programs developed to date are for the most part ineffective. They tend to teach too much while the participants learn too little. Programs are needed in which there is greater involvement of the practitioner. Continuing educational programs involving the care of the patient by the physician while under the continued guidance and supervision of experts in the field are much more apt to have lasting impact than our usual classroom or seminar approach. The fact that our efforts in continuing education have proved to be so frustrating and futile should not discourage us but only confirm the need for continued experimentation in the area.

Supervision of health care of patients today and even more so in the future will involve the talents of many individuals from the physician, the registered nurse, the practical nurse, the dietician, the innumerable technicians and technologists, etc. It is certain that medical schools will become ever more and more involved in the education and training of these para-medical personnel in conjunction with their numerous other educational activities. Moreover, novel approaches to the delivery of health care through the use of para-medical personnel are to be expected and to be encouraged. The limits and extent to which the care of patients may be judiciously delegated to non-physicians may well be one of the most important areas of experimentation in the near future. And it is proper that these efforts at determining the increased role of para-medical personnel in medical care be made under the careful scrutiny of the clinical faculty.

All of us recognize that as changes occur in our society we can expect a substantial change in the character of our patients. The medically indigent patient who has been the backbone of medical education is disappearing and the medical community will have to address itself to this problem. A well-defined community of patients will be necessary to maintain and enhance the clinical skill of our faculty and be the object of our students' studies. Whereas this community of patients in the past could be delimited by economic standards, this will be untrue in the future as the indigent patient disappears. The population served by medical schools in the future will be able to pay for their care. The days of the "hard-bench" approach in our clinics are numbered and more modern facilities, attractive, efficiently organized and administered, which will truly represent to our students medical practice in the community, will be necessary. Medical schools will have to recognize the crucial need to establish model practices in developing comprehensive care programs for the benefit of their patients and students. The university will have to restrict its community of patients to a size sufficient to fulfill its legitimate role in the community. On the other hand, the practicing physician must adapt to the disappearance of the medically indigent patient and recognize that the training of future physicians will require the use of private patients for educational purposes.

In conclusion then, we must recognize that medical schools are at an important stage of evolution. Our contributions in science have been notable, and there is every indication that they will continue to be so. However, we will be increasingly challenged to pursue our educational goals with greater efficiency and to perform our social function with greater vigor. I think it is safe to say that medical educators have recognized the changing needs of a changing society and a changing profession and have

already initiated the first somewhat hesitant steps in altering our programs. We are cognizant of the fact that further changes will be necessary in the immediate future and we are prepared to make these changes as the way becomes clear and the necessity becomes evident.

"The Impact of Medicare on Medical Education"

CARROLL L. WITTEN, M.D.*

Louisville

I DO not believe that there is anyone in the medical profession who is not aware of the importance of the future development of the Medicare Program to our profession; its impact has already been felt in almost every area of medical care. In order to illustrate the breadth of government involvement in medicine, I will cover the first year of Medicare operations and will, I think, illustrate for you the magnitude of governmental-medical profession relationship in this one program, Medicare.

1. Inpatient Hospital Services

Generally speaking, the administration of inpatient hospital benefits is going quite well. The hospital intermediaries—in most areas—are reimbursing hospitals on a timely basis and further administrative simplifications are under study. In the 12-month period ending June 1967, there were five million hospital admissions representing inpatient hospital services to four million Medicare beneficiaries. And, nationally, bills paid for inpatient hospital services by the program totaled $2.4 billion.

The fears that had been expressed that older people would overburden the hospital system have, in general, proved to be unfounded; there has been, perhaps, a 15 to 20 percent increase in inpatient services to older people — representing less than a five percent increase in overall hospital utilization.

2. Physicians' and Other Medical Services

Some $669 million was paid out under the supplementary medical insurance part of the program administered through insurance carriers—primarily (85 percent) for physicians' services. In Medicare's first 12 months, 26 million bills were processed by carriers with 61 percent of these resulting in payment and the remainder being credited toward the individual beneficiary's $50 deductible. In view of the unprecedented volume of these bills, it is hardly surprising that the carriers needed time and experience to get on top of the load. And, while processing time has varied from one part of the country to another, there has been a major improvement just about everywhere since the start of the year. The carrier for Kentucky—Metropolitan Life Insurance Company —has, however, been a poorer than average performer in comparison with a national average of 13.3 days.

3. Extended Care Services

In the first six months of 1967, there were 200,000 admissions to extended care facilities; about 2,000 in Kentucky's certified extended care facilities. The program paid $79 million nationally toward these extended care facility services. These services are provided as an alternative to the continuation of acute hospital care and should serve to release pressures on the nation's hospitals.

4. Home Health Agency Services

Some 230,000 "start of care" notices for home health agency services were received and $13 million was paid by Medicare for such services. Medicare beneficiaries received 2.3 million home health visits during the first year of operation. Thirty-five percent of the "start of care" notices were for post-hospital treatment under Part A. The remainder were for services under Part B, which does not require prior hospitalization as a condition for coverage. These services represent an alternative to inpatient care that is available when the physician believes that it is the most appropriate response to the patient's condition.

5. Outpatient Hospital Services

Intermediaries received 3.5 million bills for outpatient diagnostic and outpatient therapeutic services. About 1.9 million bills were for outpatient diagnostic services and about 1.6 million were for outpatient therapeutic services. Payment to hospitals for outpatient services amounted to $12 million in the first year of operation. The outpatient benefit *has* been the major source of administrative difficulty under the program and, therefore, has led to certain changes as evidenced in the Medicare legislation amendments of 1967.

6. Hospitals Participating in the Program

More than 98 percent of the nation's non-federal short-term bed capacity is in Medicare's 6,800 participating hospitals. Considering the quality standards established for the Medicare Program, this rate of participation must be considered a tribute to the quality of the nation's hospitals.

7. Extended Care Facilities Participating in the Program

Some 281,000 or about one-half of all skilled nursing facility beds are found in the 4,100 extended care facilities participating under Medicare. The upgrading of care that is taking place in these facilities under the quality standards established by the Medicare Program will redound to patients of all ages — and, one must add, was long overdue.

**Physician representing the Kentucky Medical Association*

8. Home Health Agencies Participating in the Program

Nationally, 1,800 home health agencies are participating in the program. Almost all of these agencies have increased the variety of services that they furnish. Over two-thirds furnish physical therapy services; over one-third offer home health aid services; over one-fifth provide use of medical appliances and equipment; and about one-fourth offer occupational and/or speech therapy. Of the participating home health agencies, 65 percent offer skilled nursing care as well as two or more additional services. The development of these agencies prompted by the Medicare Program will also redound to patients of all ages.

With this amount of involvement, can anyone doubt the impact initially and eventually on the medical profession?

Looked at in the broadest context, the Medicare Program came into being as part of a general trend in financing health care that has been increasing the portion of health costs paid by third parties. Today, virtually everyone has his medical care costs met, in part, by some public or private third-party payer. I would like to comment briefly on the implications for medical education of this general trend and on the policies adopted by the Medicare Program that have particular significance for medical education.

I do not think that there is anyone in the medical profession who needs to be told that the Medicare and Medicaid Programs are destined to eliminate the charity patient as a major factor in medical education. There are now over 19 million aged people covered by the hospital insurance part of the Medicare Program and 17.7 million of these people are also enrolled in the supplementary medical insurance part of the program. This insurance coverage has removed the aged from the ranks of the charity patient and the medical assistance that will be available when Medicaid is fully implemented by the states will mean that the medically indigent, too, will be paid-for patients for whom the traditional charity patient arrangements will not be suitable.

And I do not think that many would argue with the view that any inconvenience to teaching institutions in adapting to this new circumstance will be outbalanced many times over by the gains that will result from greater access to, and freer choice of, medical services by economically disadvantaged segments of our population. Clearly, then, our approach must not be to try to maintain practices that were viable only because the charity patient existed, but, rather, to adopt practices and emphasize values that will result in free choice of care under medical education programs by patients with practical alternatives. Where patient care under a medical education program is determined not by the patient's poverty but by the advantages to the patient in terms of quality of care, we can expect medical training to gain, not to lose.

At the same time, of course, it is incumbent on the legislators, policy makers, and administrators who develop and guide the third-party payment mechanisms to take careful account of the effects of their decisions on medical education. The greatest payment scheme that can be devised will be no more than an empty promise unless we are able to train the hands that will actually provide the care. As a member of the Health Insurance Benefits Advisory Council—the statutory body that advises the Secretary of HEW, and, under the new legislation, Congress as well, on Medicare policy—let me assure you that the officials of the Department of Health, Education, and Welfare charged with the administration of the Medicare Program are mindful of this responsibility. Few areas of Medicare policy were more carefully studied and deliberated upon than the policies affecting coverage of services rendered in a teaching setting. Prior to making final recommendations in the area, the Council and Administration officials took careful account of the views of a special consultant group of distinguished educators headed by Charles Child, M.D., chairman and professor of surgery at the University of Michigan, in an effort to develop the best possible approaches in aspects of Medicare affecting medical education. The advice finally offered by HIBAC with respect to coverage of services rendered in a teaching setting was accepted by the secretary and provides the basis for the regulations now in effect.

In considering these regulations, it is important to keep in mind that the advice offered by HIBAC, like the final regulations themselves, had to be responsive to the provisions of the Medicare Law as enacted by Congress. Under the statute, reimbursement for services rendered in a teaching setting is made under two distinct programs. The basic hospital insurance program—or Part A—reimburses hospitals and other participating providers for the cost of services to beneficiaries, including the services of residents and interns under approved teaching programs and other costs associated with medical education. The supplementary medical insurance program—or Part B—is an indemnity program that pays for charges incurred by the beneficiary for physicians' services and certain other medical services.

Now it may be readily seen that the combined reimbursement under the two programs for services rendered in a teaching setting vary with the extent to which the beneficiary receives his care from a physician whose services are covered under Part B. And I might say that the question of what constitutes physicians' services for which a bill might be paid under Part B was a matter of considerable controversy.

My personal view was, and is, that it would not only be illegal but morally wrong for a physician to submit a charge under Part B of the Medicare Program unless he personally rendered services in the care of the particular patient involved. And I do not think that the fact that the fee involved might be used to good advantage by the teaching institution would make a charge for services rendered by someone else a bit more legal or proper.

The views I have just expressed were shared by the Health Insurance Benefits Advisory Council and

the advice we offered on this matter is embodied in the following passage from Medicare regulations:

"Payment on the basis of reasonable charges is applicable to the professional services rendered to a beneficiary by his attending physician where the attending physician provides personal and identifiable direction to interns or residents who are participating in the care of his patient. In the case of major surgical procedures and other complex and dangerous procedures or situations, such personal and identifiable direction must include supervision in person by the attending physician. A charge should be recognized under Part B for the services of an attending physician who involves residents and interns in the care of his patient only if his services to the patient are of the same character, in terms of the responsibilities to the patient that are assumed and fulfilled, as the services he renders to his other paying patients. The carrying out by the physician of these responsibilities would be demonstrated by such action as: Reviewing the patient's history and physical examination and personally examining the patient within a reasonable period after admission; confirming or revising diagnosis; determining the course of treatment to be followed; assuring that any supervision needed by the interns and residents was furnished; and by making frequent reviews of the patient's progress."

Adherence to the principles set forth is, I think, not only required in fairness to the people who pay for Part B through their premiums and taxes but is also required by good medical and teaching practice. Far more important to the cause of medical education is, in my view, the fact that Medicare has provided the kind of financial support to teaching hospitals which is necessary to support both high quality service and education. First, the program is paying for services on a reasonable cost basis that teaching hospitals were previously providing free or below cost. Second, reasonable cost reimbursement has been defined for purposes of the program to include stipends for trainees, compensation of teachers, and other costs of approved educational programs. Third, the program pays reasonable charges by the attending physician for personal and identifiable direction of interns and residents in the care of his patient under the conditions I have outlined. The net result should be a substantial improvement in the financial condition of teaching hospitals, especially those that have traditionally had large charity or welfare caseloads.

To summarize, I believe that medical education is a major beneficiary of the Medicare Program. The shift in emphasis from the charity to the paying patient as a participant in medical education that is being caused by payment for health services through Medicare and other third-party payers can be expected to improve the climate in which physicians and other medical personnel are trained to serve the public. It will do this by requiring the adoption of practices in providing care under medical education programs that are acceptable to the patient who could, if he wished, go elsewhere. At the same time, the Medicare Program will facilitate the improvements that are needed in medical education by alleviating the financial problems faced by many teaching hospitals. It is up to those of us who are involved in medical education to do our part by taking advantage of the opportunity offered by these "Medicare benefits" to medical education by translating them into actual improvements in both our service to patients and our teaching programs.

"The Impact of Social and Economic Changes on the Practice of Medicine"

CHARLES RUTLEDGE, M.D.*

Hazard

IT is of course trite to say that there has been a tremendous change in medical care in recent years. I realize this was probably the feeling of doctors in the past but I think there is no question we are now going through a tremendous change in medicine, both on the scientific and social and economic levels. The recent heart transplants certainly brought a dramatic world-wide focus on advances in medicine. Whether or not medicine was ready for this step now is being debated and I am sure will be debated, but the point still remains that this has focused public attention on medicine and medical advances, and it is only one dramatic example of the many advances in medical care that are going on at the present.

The social and economic changes were nearly as dramatically focused with the advent of Medicare. I think it has been a fairly definitely stated concept of the federal government that comprehensive health care would be available to all Americans. I think the Administration is taking it upon itself to feel it is its responsibility to see that this is done and is going about it in the usual bureaucratic way. This is going to become more and more the concern of local, state and federal governments. I think the integration, coordination and regionalization of all health facilities and services from the grass roots up is being organized at the present time. For instance, there has already been developed a plan for Kentucky for small hospitals, regional hospitals and then the larger central hospitals, such as the Medical School Center. I would imagine it will be the government's concept that doctors be educated by the government and assigned by the government before too long.

I would like to discuss the impact of social and economic changes on medicine as related to Eastern

*Physician representing the Kentucky Medical Association

Kentucky with which, of course, I am more familiar. However, I think this is important to doctors in the rest of Kentucky because, due to the greater shortage of physicians in our area, the government has decided to put various pilot projects in this area to show the rest of the country how they feel medicine should be practiced.

To go back, Eastern Kentucky has been isolated due to lack of roads, and medical care has been difficult. Many of you are familiar with the mining camp medical practice where the camp doctor was paid by a cut off from the salary of each employee; he worked 24 hours a day seven days a week, he was called in cases of real illness and, most of the time, in cases of mild headaches. Even when the miner wanted to ride home, he would get the doctor to make a house call so he could ride to the house. They paid a flat fee per month and frankly abused it in many cases. The cut off also was paid to doctors in the local hospitals for hospital care for the patients. This system of practice certainly did not lend to the highest type medical care, and the isolation did not either. Next, the United Mine Workers Welfare and Retirement Fund took over the payment of medical care. In many ways, this did raise the standard of care. They did insist on consultations and on fair quality of care. At this time however more roads were being built, access to the area was easier and the standards of medical care were increasing all over the country. The UMWA program also *used* doctors. In 1948 when the UMW wanted to get an increase in the royalty per ton, doctors in the Pikeville area have told me they were encouraged to use the program as much as possible. All in-patient and out-patient care was paid for all dependents and the local administrators of the program are said to have told local doctors to use it as much as possible because "we want to break the fund in order to get an increase." As the next step, the UMW built new hospital facilities in Eastern Kentucky and brought in salaried physicians. This, in one sense, again raised the standards of medicine as they brought in some well trained physicians. But all these hospitals were designated as first for UMW beneficiaries and second for any other people of the area. In other words, the hospitals were built not as community hospitals but as UMW hospitals with community care available on an overflow basis. This also brought conflict between the doctors residing in the area and the new salaried physicians, most of whom did not plan to remain in the area. The turnover on the general physician (as they called the men in general practice) was terrific.

Finally, the program broke even the UMW so it was the government's turn to take over the underwriting of this health care. As expected, practically all the doctors who had been on salary left the area when their salaries stopped. The money for purchasing the hospitals was put up by the federal government and turned over to the Appalachian Regional Hospitals, a non-profit organization which took over the hospitals. Unfortunately, the hospitals were not built as community hospitals; therefore, they were frequently not built in the most desirable location and they were built mainly as four-bed wards rather than semi-private and private rooms current in other areas. They were built naturally to use coal and hard, rather inefficient heating systems. Also they were built by a labor union and naturally the rates of the unskilled employees were quite high. This was inherited by the next administrator.

We now come to the present era of poverty programs, pilot projects, rehabilitation programs, etc.

There have been obstetrical and pediatric projects in parts of this area for several years which have gone through the State Health Department, and in which the doctors were paid for delivery and care of the infant for a period of time, the idea being, I believe, to show how improvement in care can be accomplished. There is a pilot project in our neighboring county of Leslie which makes an effort at case finding, to reach every person in the county to upgrade their medical care. This is paid, of course, by the government and I believe the criteria are quite liberal as to who is eligible.

In Hazard, we have the Medicaid Program as you do over all of Kentucky, but I would say our percentage of people eligible is as high as any area in the state. Many of the people eligible, of course, never paid their bills previously, many others did pay their bills but probably will never do it again, once they have been imbued with the idea that the responsibility is that of the government. We also have Vocational Rehabilitation programs whose concern is to return people to a job. Many people who are not eligible for payment for their medical services otherwise can get such services paid for by "Rehab", and eligibility is interpreted quite liberally.

All these changes are dramatically altering the face of medicine. The Medicaid Program as set up is exactly the same old story as that of the boy who wove a fancy picture to his beautiful date. He asked her if a tremendously wealthy playboy gave her a check for one million dollars to make her wealthy for life, would she go to a famous resort with him for a weekend. The boy built this up into a very grand sounding experience and the girl said, "Well, I expect I would." He then said "How about spending the night with me for $2.00?" She indignantly slapped him and said, "What do you think I am?" He said, "We have already established that, we are now just haggling over price."

That is exactly what I feel Medicaid has done. They have set a fee for office work and for hospital admission and consultation. These fees in many cases were above the prevailing charge in many of the rural areas. We did complain about this; we objected to it but with various excuses from the state government that this would be changed to usual and customary fees, we have gone along with it. The state still says it is going to change to usual and customary fee and with the change of state administration, this may be possible. Still the trend is to buy us as well as everyone else with a desirable sounding arrangement, but not in the manner that has been traditional and that we feel is to the best interest of the patient.

(Continued on page 671)



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Dosage and Administration: In women: one 250-mg. oral tablet three times daily for ten days. A vaginal insert of 500 mg. is available for local therapy when desired. When used, one vaginal insert should be placed high in the vaginal vault each day for ten days; concurrently two oral tablets should be taken daily.

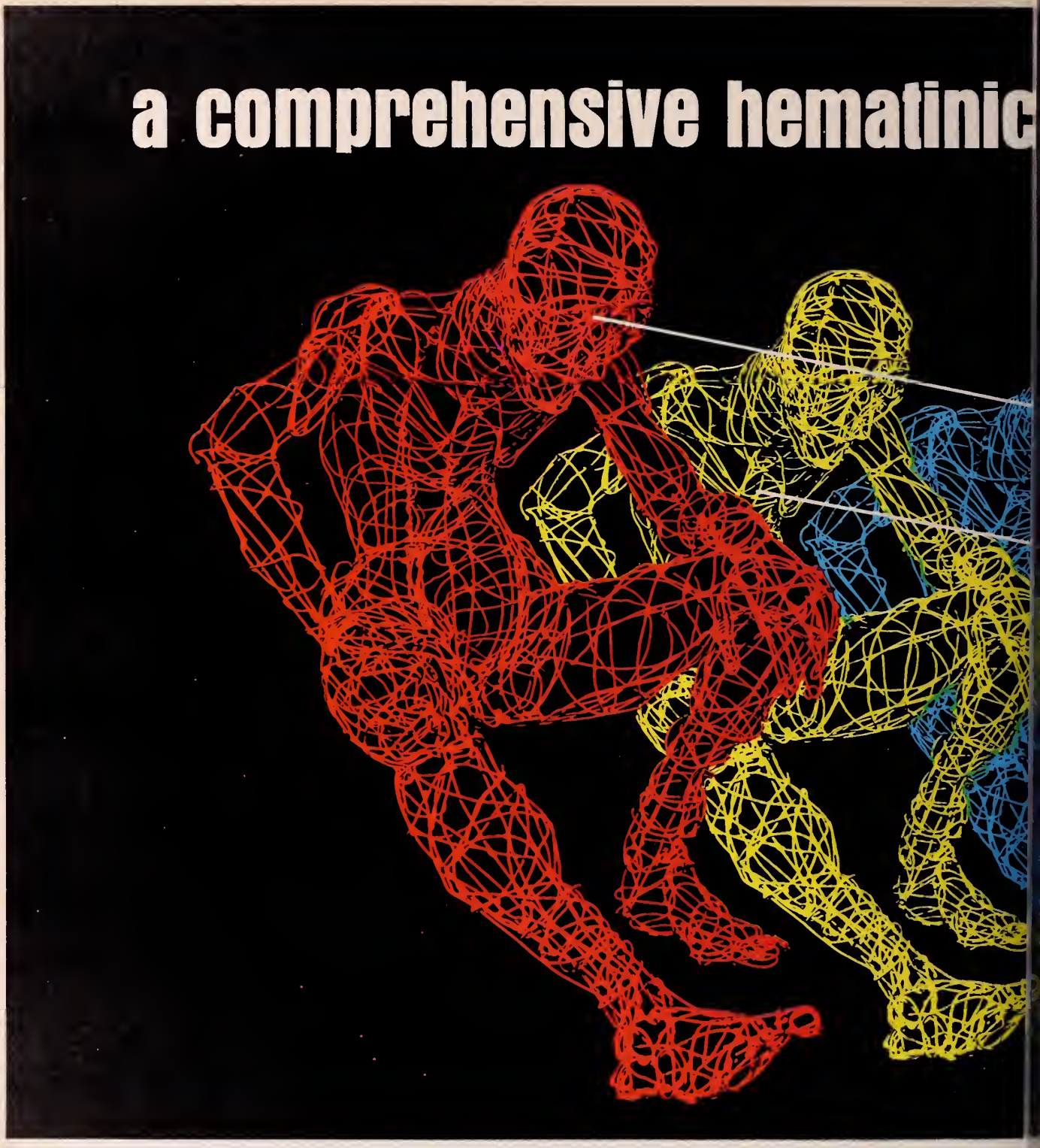
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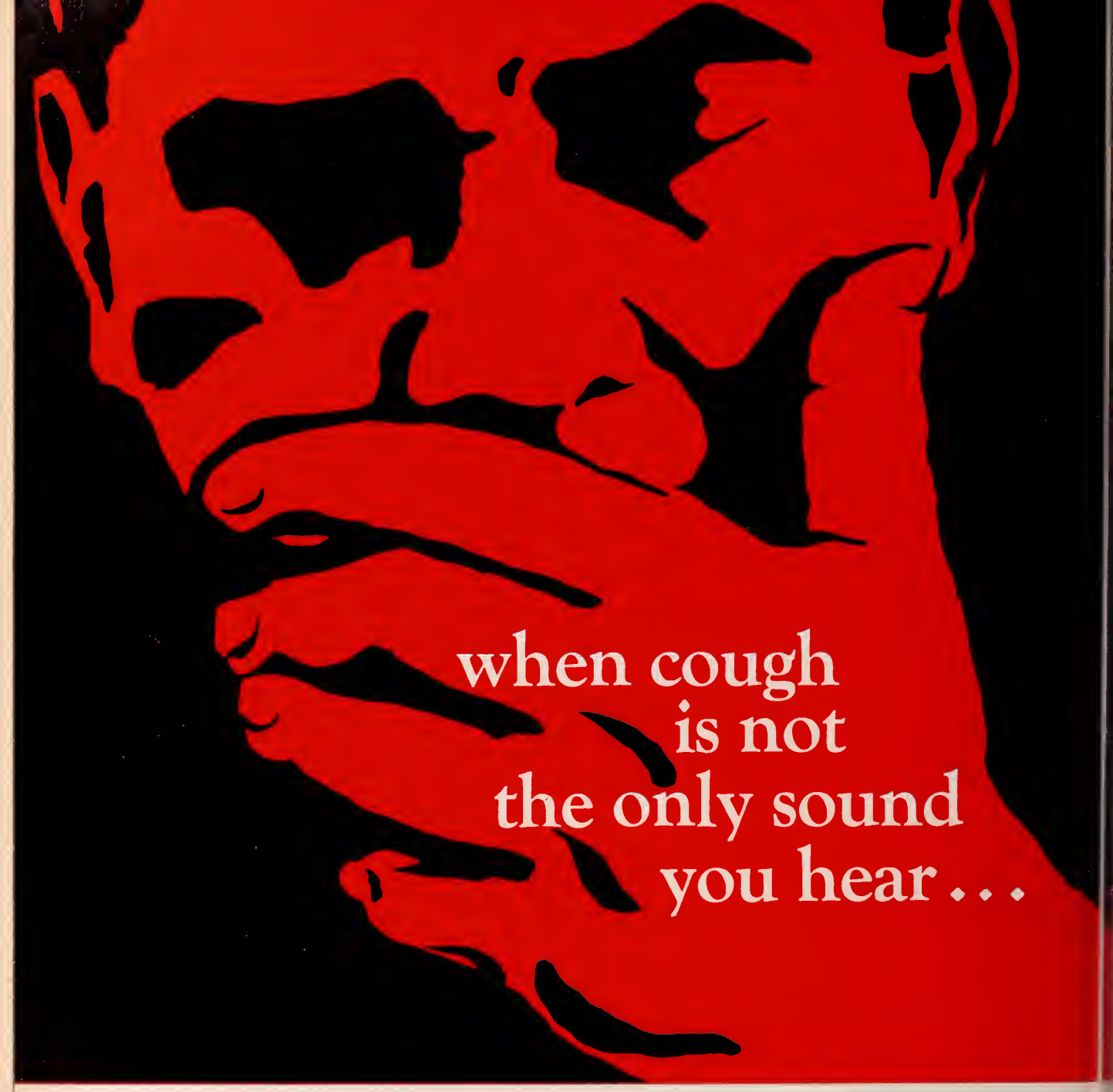
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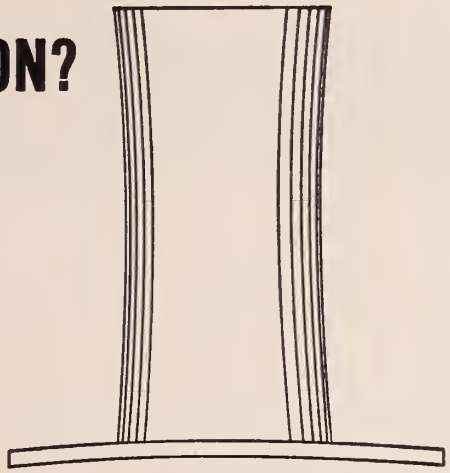
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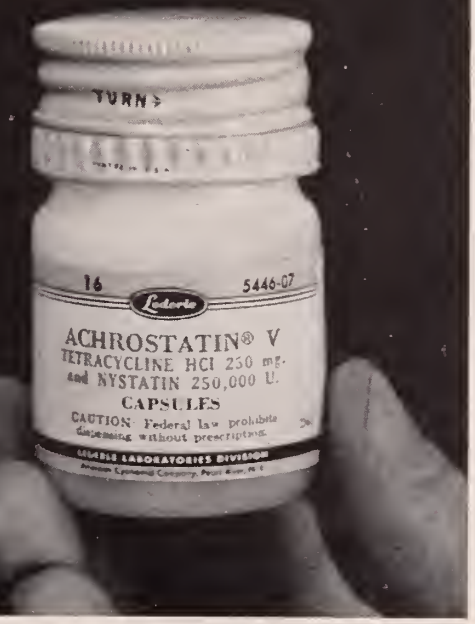
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EDITORIALS

Appalachia and the Presbyterians

LAST year Mr. John Fetterman wrote an informative and interesting book entitled "Stinking Creek." It is regarded by some as rather controversial as it may overemphasize the sordid side to the sacrifice of some of the better features of the area. The work, however, is a very valuable contribution to our present appraisal of problems in the state. In his well written historical sketch, the foreword, Mr. Harry Caudill deplores what he characterizes as the betrayal of the mountaineer by the timber barons, the coal corporations, and the politicians. He continues, "He was betrayed by the mission schools and colleges which came to educate his children and taught them to leave the region rather than to stand and fight for its development or, in the case of those few who actually remained, failed to inspire them to lead their people in the building of a society worthy of their heritage." This opinion may, at least, be open to some question.

The Harlan Enterprise recently announced that E. Murphy Howard, M.D., had closed his office, but would continue with the Harlan Hospital which he and W. P. Cawood, M.D., established before the first World War. Few physicians have served Kentucky so well and so long as has Doctor Howard. Among his many contributions in his profession, he was president of the KMA in 1943 and president of the State Board of Health from 1928 to 1963. His leadership in civic affairs outside his profession has been just as distinguished. It is interesting that in his interview he commented, "If not for some Presbyterian people who came to Harlan when I was a boy, I probably would not have had an education. They built a brick school on Clover Street and brought teachers from the East, and they were very good."

Mr. Virgil Eversole also attended this same academy and he, too, remained to establish a most enviable record of civic and church leadership. In 1962, when the United Mine Workers Association announced that their hospitals would close, Doctor McMaster Kerr, pastor of the First Presbyterian Church in Harlan, with Mr. Eversole and other members of the church, applied to the Presbyterian Board of National Missions for consultation. Negotiations were thus begun which effected the salvage of these hospitals for continued service to Eastern Kentucky. To these we might add an imposing list of men and women natives of Harlan, or Bell or Pike or Knox Counties, who had their start in mission or public schools of the area, obtained their advanced education in Kentucky schools, and stayed to fill positions of leadership in their respective communities. Granville Pearl Bailey, M.D., practiced medicine in Harlan for many years. He brought the first x-ray equipment to Eastern Kentucky by wagon. His son, Clark Bailey, M.D., succeeded him and became a national figure in American medicine, president of KMA, and first vice-president of AMA.

On a bright Sunday morning, in the summer, two brothers were fishing in the north fork of the Kentucky River at Blackey, their home. A little man came down the road on his horse, stopped and inquired, "How's fishin' boys?" "Not worth a dam," was the forthright reply. The rider dismounted, took a pole and fished with them for a while. His luck was no better. He suggested that since fishin' seemed pretty discouraging, they come with him to Sunday School. They did and became interested. They and their brother all did well



in school. They attended the Stewart Robinson School at Blackey, operated by the Presbyterian Church, graduated from Centre College, and advanced to higher levels of education. Fred W. Caudill, M.D., became a physician, devoted his life to a very distinguished career in public health in Kentucky and fell victim to a fatal infection in mid-life, acquired through his work in epidemiology, his field of special interest. One brother became a Kentucky journalist and the other taught in the state throughout his life.

The little man on horseback was Doctor E. O. Guerrant, a Presbyterian minister. He had been a Confederate soldier. He lived on a beautiful country estate at Wilmore, but devoted his life to evangelism, teaching, and the establishment of schools in Eastern Kentucky. Many of the churches and schools which grew from his ministry are still in operation. The men and women who found themselves in these institutions and attained positions of Christian leadership in this state and elsewhere cannot be accurately traced, but they are numerous. The large and active health center at Buckhorn is dedicated to Doctor Guerrant's memory.

The story of this type of help is endless, can be recalled for every area in Eastern Kentucky, and continues today. In his book, Mr. Fetterman details the activity of Miss Irma Gall from the Church of the Bretheren, a teacher, and Miss Peggy Kemner, from the Church of the Nazarene, a nurse; they have pooled their resources to bring light and health and inspiration to one of the neglected areas of Knox County, and their efforts are bearing abundant fruit. It is one of many very effective, privately initiated and financed projects which continue to provide good citizens and enlightened leadership in the state and beyond.

Every Christian faith has participated in the improvement of culture and the standard of living in Appalachia; the Presbyterians have been there a long time, have established many schools and health centers, and have undoubtedly led all the others. Some of their smaller schools such as at Frenchburg, Hazel Green, Pippa Pass and the Stewart Robinson School have closed, but Pikeville College and Lee Junior College at Jackson and others continue.

Nor have the timber barons and the coal corporations done such a disgraceful job of betrayal. It was the development of timber and coal industries that brought railroads to the area long before any other transportation facilities had been provided. With the mines came schools, recreational facilities and cultural activities previously not known. Mr. John C. C. Mayo, a timber and coal "baron" built

and operated Mayo College at Paintsville. But for timber and coal financing Cumberland College at Williamsburg would not have survived. Hospitals at Lynch and at Jenkins were built, staffed and operated by coal companies and provided, in their day, health facilities on a par with that offered elsewhere in the state. The 10 United Mine Workers modern and elaborate hospitals in the area were built, staffed and operated by the 40 cents a ton on coal paid by coal operators. Well-trained specialists in all medical and surgical fields were brought there by this fund and provided the first really comprehensive medical service Appalachia had known. It is this group of hospitals that the Presbyterian Church arranged to continue in service after they were abandoned by the United Mine Workers Fund. A group of English coal and timber operators at Middlesboro laid out the first golf course in America. It is still in operation and one of the prime recreational attractions of Eastern Kentucky.

Kentucky Appalachia is not so destitute and backward as it has been advertised in the last generation. There is wealth and culture in every county and its poverty is not worse than that found in all of our cities. It has historical shrines, state parks, recreational facilities, sporting and tourist attractions equal in quality to those found elsewhere in the state. Its native sons have remained to enrich and provide higher living standards in their communities; Paul B. Hall, M.D. of Paintsville; Mr. Jesse Stuart of W. Hollow; Mr. Carl Perkins, U. S. representative, of Hindman; former Governor Bert Combs from Manchester; Mr. Harry Caudill of Whitesburg; and a multitude of others have given superb leadership to an area, the beauty and natural resources of which are unexcelled. And it is inhabited by Kentuckians second to none in patriotism, honesty, and capacity. It is no crime if some of them are poor.

The Presbyterians and other organizations and individuals who have attempted to elevate the standards of living in Eastern Kentucky, while preserving the dignity and independence of the inhabitants, have been there a long time and will continue into a brighter future. Federal help is necessary and welcome but needs not to be patronizing nor so efficiently publicized as it has been in the past. We have many reasons to be proud of our Appalachia.

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KMA ANNUAL MEETING

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ORGANIZATION SECTION

Out-of-State Guest Speakers To Participate on Color TV Panels With Kentucky Physicians at KMA Annual Meeting Sept. 24-26

Participating with Kentucky physicians in four color TV panel discussions during the 1968 KMA Annual Meeting September 24-26 will be prominent guest speakers from across the country. The discussions will highlight the four general scientific sessions at Louisville's Convention Center.



Doctor Heath

John Hedley-Whyte, M. B., Boston, Mass., guest of the Kentucky Society of Anesthesiologists, and David Spain, M. D., Brooklyn, N. Y., guest of the Kentucky Society of Pathologists, will take part in the first Color TV Clinic, "Respiratory Diseases," moderated by Peter Bosomworth, M. D., Lexington. Other panelists will be Nathan I. Handelman, M. D., Louisville, Harold Rosenbaum, M. D. and Kent Trinkle, M. D., Lexington.

The discussion of "Office Examinations," moderated by Fred C. Rainey, M. D., Elizabethtown, will feature William S. Smith, M. D., Ann Arbor, Mich., guest of the Kentucky Orthopaedic Society. The panel will include Walter S. Coe, M. D. and Richard L. Roth, M. D., Louisville, and Sheldon Rovin, D. D. S., Lexington.

Participating in the TV Clinic on "Human Sexuality", moderated by Philip S. Crossen, M. D., Lexington, will be Robert G. Heath, M. D., New Orleans, La., guest of the Kentucky Psychiatric Association, and Karl Olsen, M. D., Cleveland, Ohio, guest of the KAGP. Other panelists will be John Cole, M. D. and Stephen J. Zwirek, M. D., Lexington.

In addition to the panel discussions, the scientific sessions will feature many individual presentations by both guest speakers and Kentucky physicians, the President's Address and presentation of the scientific exhibit award.

Other features of the Annual Meeting will include meetings of 16 specialty groups, two sessions of the KMA House of Delegates, the annual convention of the Woman's Auxiliary, an Orientation Program for new members, more than 75 scientific and technical exhibits, University of Louisville Alumni Reunions, the annual KEMPAC Seminar and a number of miscellaneous meetings to be announced in the program booklet.



Doctor Hedley-Whyte



Doctor Smith

Doctor Hedley-Whyte is an associate professor at the Harvard Medical School and anaesthetist-in-chief at Beth Israel Hospital. A fellow of the American College of Anesthesiology, he received his M. B. in 1958 from St. Bartholomew's Hospital Medical School. He is a reviewer for the Journal of Clinical Investigation and an ad hoc consultant for the General Medical Research Program Project Committee of the National Institutes of Health.

A professor of surgery at the University of Michigan Medical Center, Doctor Smith is a a 1943 graduate of the University of Michigan Medical School. He is a recipient of the Kappa Delta Award for outstanding scientific contribution to the field of orthopaedic surgery and a fellow of the American Academy of Orthopaedic Surgeons and the American College of Surgeons.

Doctor Heath is chairman of the department of psychiatry and neurology at Tulane University School of Medicine. A 1938 graduate of the University of Pittsburgh School of Medicine, he is vice president of the Society of Biological Psychiatry and associate editor of the International Review of Neurobiology. Doctor Heath has authored 230 scientific papers and three books.

KMA President George F. Brockman, M. D., Greenville, has announced that the complete program for the Annual Meeting will appear in the August issue of The Journal.

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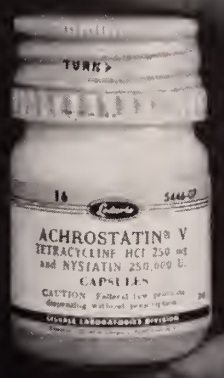
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Dr. Lewis Named President-Elect Of Kentucky Surgical Society

The Kentucky Surgical Society chose Blaine Lewis, Jr., M.D., Louisville, as its president-elect during the Society's annual meeting May 17 and 18 at Park Mammoth Resort, Park City.



Doctor Lewis

John S. Sprague, M.D., Lexington, was elected secretary-treasurer of the Society, the office which Doctor Lewis held for the last six years. John Dickinson, M.D., Glasgow, was installed as president.

A 1943 graduate of the University of Louisville School of Medicine, Doctor Lewis is a member of the American College of Surgeons and the American Branch of the International Society of Surgery. He is currently serving as a member of the McDowell House Board of Managers.

Mark A. Hayes, M.D., New Haven, Conn., professor of surgery at Yale University, was the guest speaker at the meeting. He discussed "Congenital Anomalies of the Bile Duct Colon: Hazards and Helps."

KEMPAC Plans Annual Seminar

The Kentucky Educational Medical Political Action Committee (KEMPAC) has scheduled its annual Seminar at 6 p.m., September 23, in the Flag Room of the Kentucky Hotel just prior to the opening of the KMA Annual Meeting, according to John C. Quertermous, M.D., Murray, chairman of the KEMPAC Board.

Complete details concerning the program and guest speakers will be released in the August issue of The Journal. KEMPAC membership has reached an all-time high this year of 820 physicians and their wives, Doctor Quertermous announced at press time.

Diabetes Assn. To Meet Sept. 26

The Kentucky Diabetes Association will hold its annual meeting at 3:30 p.m., September 26 in a joint session with the Kentucky Chapter of the American College of Physicians, according to John B. Selby, M.D., Louisville, chairman of the Program Committee. The meeting will be at Louisville's Convention Center during the Annual Meeting of the Kentucky Medical Association.

Priscilla White, M.D., Boston Mass., will be the guest speaker for the session. She will discuss "The Management of the Vascular Complications of Diabetes." Doctor White is also scheduled to address KMA members during the September 25 General Scientific Session of the KMA meeting.

Correction

The Journal of the Kentucky Medical Association regrets an error appearing on page 573 of the June issue in which the names beneath the photographs of Doctor Rulander and Doctor Rainey were inadvertently switched. The photograph at the left is that of Doctor Rulander. Doctor Rainey's photograph appears at the right.

Ky. Ob-Gyn Society Names Dr. Roddick Pres.-Elect

The Kentucky Obstetrical and Gynecological Society chose John W. Roddick, Jr., M.D., Lexington, president-elect during its Annual Spring Meeting April 26 and 27 in Louisville.



Doctor Roddick

Doctor Roddick is a professor of obstetrics and gynecology at the University of Kentucky Medical Center. He has been at the Center since 1964. Before coming to Kentucky he was on the staff of the Northwestern University Medical School.

A 1950 graduate of Northwestern, Doctor Roddick is a member of the American College of Obstetricians and Gynecologists, the American College of Surgeons and the Society of Pelvic Surgeons.

Featured speakers at the meeting, which was supported by a grant from the Kentucky Division of the American Cancer Society, included Professor John Stallworthy, Oxford, England; Howard W. Jones, Jr., M.D., Baltimore, Md.; Richard Symmonds, M.D., Rochester, Minn.; and Felix Rutledge, M.D., Houston, Texas.

First prize for residents' papers was awarded to Arthur J. Donovan, M.D. and Thomas J. Ciaccio, M.D., Louisville General Hospital. Pedro Segarra, M.D., St. Joseph Infirmary, received second prize.

U of L Alumni Chairmen Selected For Annual September Reunions

Chairmen of the University of Louisville School of Medicine five-year classes planning annual alumni reunions during the KMA Annual Meeting in September have been selected, according to Les Shively of the Alumni Office.

For information of those U of L alumni planning to participate in their class reunions this year, the names, addresses and telephone numbers of the

chairmen are listed below. All chairmen are located in Louisville.

1928—Pat R. Imes, M.D., 558 Medical Towers Bldg., 585-2189

1933—Naaman H. Burkhead, M.D., 700 Brown Bldg., 584-2421

1938—J. Thomas Giannini, M.D., 464 Medical Towers South Bldg., 583-2766

1943—Clarence E. Quaife, M.D., 2007 Bonnycastle Ave., 451-3948 and Blaine Lewis, M.D., 1711 Heyburn Bldg., 582-2023

1948—Laura V. Kimbrough, M.D., 4242 North Western Pkwy., 774-2412

1953—(To be selected)

1958—Thomas E. Campbell, M.D., 704 Medical Towers Bldg., 587-8402

1963—Eugene H. Kremer III, M.D., 612 Medical Towers Bldg., 584-2257

Twelve Trustee Districts Meet In 1967-68 Associational Year

Twelve of KMA's 15 trustee districts held meetings during the 1967-68 Associational year. KMA President George F. Brockman, M.D., Greenville, was the featured speaker at each meeting. Doctor Brockman discussed redistricting and other issues of interest to Kentucky physicians.

Sharing eight programs with Doctor Brockman, Fred C. Rainey, M.D., Elizabethtown, kept members informed of action taking place in the Kentucky General Assembly relating to medical matters. Doctor Rainey is chairman of the Committee on Legislative Activities for State Affairs.

David A. Hull, M.D., Lexington, a member of the Legislative Committee, spoke at two meetings about legislation and the activities of KEMPAC. Hoyt D. Gardner, M.D., Louisville, chairman of the Committee on Legislative Activities for National Affairs, participated in the program for one meeting.

Two districts offered scientific programs in connection with their meetings and a number of districts included separate programs for physicians' wives. At press time the Twelfth District was planning a meeting June 26. Other districts which met during the year are the First, Second, Third, Fourth, Fifth, Seventh, Ninth, Tenth, Thirteenth, Fourteenth and Fifteenth.



David A. Hull, M.D., Lexington, a member of the KMA Legislative Committee, outlines the activities of KEMPAC for physicians at a meeting of the Fifteenth Trustee District May 22 in Barbourville. KMA President George F. Brockman, M.D., Greenville, also spoke at the meeting.



Fifteenth KMA Trustee District physicians and guests listen attentively to the program presented at a meeting May 22 in Barbourville, one of 12 trustee district meetings held during the year. Shown from left to right are Theodore Davies, M.D., Barbourville; Paul R. Smith, M.D., London; Francis X. Sommer, M.D., Barbourville (behind Doctor Smith); Frank Turney, M.D., Knoxville, Tenn., a participant on the scientific program preceding the meeting; Meredith Evans, M.D., Middlesboro; and Gene W. Scott, M.D., Williamsburg. E. C. Seeley, M.D., London, (not pictured) is trustee for the district. Harold L. Bushey, M.D., Barbourville, served as local chairman.



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Dextro-amphetamine sulfate: Excessive use by unstable individuals may result in psychological dependence.

Meprobamate: Careful supervision of dose and amounts prescribed is advised, especially for patients with known propensity for taking excessive quantities of drugs. Excessive and prolonged use in susceptible persons, e.g. alcoholics, former addicts, and other severe psychoneurotics, has been reported to result in dependence on the drug. Where excessive dosage has continued for weeks or months, reduce dosage gradually. Sudden withdrawal may precipitate recurrence of preexisting symptoms such as anxiety, anorexia, or insomnia; or withdrawal reactions such as vomiting, ataxia, tremors, muscle twitching and, rarely, epileptiform seizures. Should meprobamate cause drowsiness or visual disturbances, reduce dosage and avoid operation of motor vehicles, machinery or other activity requiring alertness. Effects of excessive alcohol consumption may be increased by meprobamate. Appropriate caution is recommended with patients prone to excessive drinking. In patients prone to both petit and grand mal epilepsy meprobamate may precipitate grand mal attacks. Prescribe cautiously and in small quantities to patients with suicidal tendencies.
Side Effects: Overstimulation of the central nervous system, jitteriness and insomnia or drowsiness. Dextro-amphetamine sulfate: Insomnia, excitability, and increased motor activity are common and ordinarily mild side effects. Confusion, anxiety, aggressiveness, increased libido, and hallucinations have also been observed, especially in mentally ill patients. Rebound fatigue and depression may follow central stimulation. Other effects may include dry mouth, anorexia, nausea, vomiting, diarrhea, and increased cardiovascular reactivity.

Meprobamate: Drowsiness may occur and can be associated with ataxia; the symptom can usually be controlled by decreasing the dose, or by concomitant administration of central stimulants. Allergic or idiosyncratic reactions: maculopapular rash, acute nonthrombocytopenic purpura with petechiae, ecchymoses, peripheral edema and fever, transient leukopenia. A case of fatal bullous dermatitis, following administration of meprobamate and prednisolone, has been reported. Hypersensitivity has produced fever, fainting spells, angioneurotic edema, bronchial spasms, hypotensive crises (1 fatal case), anuria, stomatitis, proctitis (1 case), anaphylaxis, agranulocytosis and thrombocytopenic purpura, and a fatal instance of aplastic anemia, but only when other drugs known to elicit these conditions were given concomitantly. Fast EEG activity, usually after excessive dosage. Impairment of visual accommodation. Massive overdosage may produce drowsiness, lethargy, stupor, ataxia, coma, shock, vasomotor and respiratory collapse.

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KSAMA Has Record Attendance At Sixth Annual Convention

A record attendance of 117 medical assistants representing 15 counties was achieved at the Sixth Annual Convention of the KSAMA May 18-19 at the Campbell House Inn, Lexington, according to Mrs. Virginia Applegate, Louisville, outgoing president of the organization.

In a service conducted by Thomas J. Ferriell, M.D., Elizabethtown, the new officers installed were Mrs. Jane Burks, president; Miss Libby Curtsinger, president-elect; Mrs. Mabel Veech, vice president; Miss Faye Jordan, recording secretary; Miss Gerry Shultz, treasurer; and Mrs. Helen Carter, director.

Guest speaker Henry B. Asman, M.D., Louisville, KMA president-elect, discussed the role of the medical assistant on the health care team and pledged to promote the advantages of membership in KSAMA in his travels throughout the state as KMA president in the coming year.

Educational sessions held during the meeting featured programs on Treatment of Office Emergencies, Oral Cancer in Kentucky, Radiation Therapy, Drug Abuse and Advancements in Kidney Transplants.

It was announced at the business meeting that a group of Lexington medical assistants had begun preparations for organizing a county chapter of KSAMA as a result of the convention.

Automotive Safety Awards Go To Post Office, Div. of Police

The Kentucky Medical Association presented its Tenth and Eleventh Automotive Safety Awards to the Louisville Division of Police and the Louisville Post Office recently.

Col. C. J. Hyde, Chief of Police, accepted the Tenth Award on behalf of the Louisville Division of Police and William J. O'Mara, safety officer, received the Eleventh Award for the Post Office.

On hand for the presentations were Arthur Keeney, M.D., Wills Eye Clinic, Philadelphia, former Louisville ophthalmologist and chairman of the KMA Highway Safety Committee which established the award several years ago, and William T. Rumage, Jr., M.D., Louisville, chairman of the Disaster Medical Care Committees of KMA and the AMA.

The KMA Automotive Safety Awards have been granted only to those organizations with seat belts installed in 100 percent of the vehicles operated by their memberships. The Twelfth Award will be presented to the Southern Bell Telephone and Telegraph Company in the near future.



Recipients of the Tenth and Eleventh KMA Automotive Safety Awards display the certificates they accepted recently on behalf of their organizations. Pictured from left to right are Arthur Keeney, M.D., Philadelphia, Pa., William O'Mara, Louisville Post Office, Col. C. J. Hyde, Chief of Police, Louisville Division, and William T. Rumage, Jr., M.D., Louisville.

KMA Placement Service Provides Two-Way Information Flow

Kentucky physicians seeking associates and those physicians desiring to locate in the state are reminded that the Physician Placement Service at the KMA Headquarters Office provides a two-way flow of information in this area.

The Service compiles a quarterly report entitled "Physicians Seeking Locations" which is available to any Kentucky physician upon request. The names on this list include scholarship recipients, recent medical school graduates, physicians discharged from military service and doctors who have inquired at KMA or the AMA about available locations in Kentucky.

A semi-annual report called "Opportunities for Practice in Kentucky" is also available upon request to those physicians wishing to practice in the state. A complete up-to-date record of both types of information is on file at the Headquarters Office and physicians are encouraged to make use of this service.

KMA Adds 30 Physicians To Membership Roster

Thirty physicians have become new members of the Kentucky Medical Association, according to the records of the membership department as of July 15.

The new members are William J. Bechmann, Jr., M.D., Florence; Joseph R. Bowling, M.D., Catlettsburg; Charles D. Eversole, M.D., Covington; Enrique E. Hinojosa, M.D., Harlan; J. Wesley Johnson, M.D., Ashland; Thomas J. Kalmer, M.D., Ft. Worth, Texas; William H. Keller, M.D., Frankfort; Lamar C. Meigs, M.D., Ashland; Lowell F. Roberts, M.D., Benton; Garner E. Robinson, M.D., Ashland; John B. Wofford, M.D., Knoxville, Tenn.; and Kenneth N. Zegart, M.D., Upper Darby, Pa.

Four new members in Lexington are Harry G. Caldwell, M.D.; David H. Looff, M.D.; Ronald A. Moss, M.D.; and Cornelia B. Wilbur, M.D.

New members in Louisville include James W. Curry, M.D.; Fielding W. Daniel, M.D.; John C. Devlin, M.D.; R. Brooks Howard, M.D.; James M. Mahan, M.D.; Gerald L. Moore, M.D.; Richard R. Nave, M.D.; Robert C. Pfeiler, M.D.; Robert L. Rainey, MD.; Bernard F. Sams, Sr., M.D.; Walter L. Thompson, M.D.; James D. Walker, M.D.; Thomas R. Watson, M.D.; and Roger K. White, M.D.

ARE YOU ELIGIBLE TO VOTE?

In order to vote in the November 5 general election you must be properly registered by the September 7 deadline. You are urged to check your registration status and to remind your family and staff to do so.

KMA Committee Reports

Committee on Cults

David B. Stevens, M.D., Lexington, Chairman

KMA Headquarters Office **May 1, 1968**

The Committee on Cults met May 1, 1968, to discuss the action by the 1968 session of the Kentucky General Assembly on legislation followed by KMA and of interest to the Committee. Future plans of the Committee were also discussed.

Technical Advisory Committee on Indigent Medical Care

Caroll H. Robie, Jr., M.D., Louisville, Chairman

State Department of Health **May 2, 1968**

The Technical Advisory Committee on Indigent Medical Care met with representatives of the Medical Assistance Division of the State Department of Health and representatives of the Department of Economic Security on May 2, 1968, in Frankfort, to discuss a number of procedural changes that will need to be made in the Title XIX Program prior to July 1, 1968. At this time, physicians are scheduled to be paid for out-of-hospital services on the usual and customary basis with reasonable limitations.

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AMA ANNUAL MEETING

The Annual Meeting of the American Medical Association was in session at the time this issue of **The Journal** went to press. Complete details will be carried in the August issue.

In Memoriam

CLYDE L. GARR, M.D.
Flemingsburg
1887-1968

Clyde L. Garr, M.D., 81, a retired physician, died May 19 at Fleming County Hospital. Doctor Garr graduated from Louisville Medical College in 1910. He practiced in Fleming County for 51 years.

CHAPMAN S. MOORMAN, M.D.
Louisville
1894-1968

Chapman S. Moorman, M.D., 76, a urologist, died May 22 at Louisville General Hospital. A 1927 graduate from Indiana University School of Medicine, Doctor Moorman had practiced in Louisville since 1934. He was a member of the American Urological Association and the American College of Surgeons.

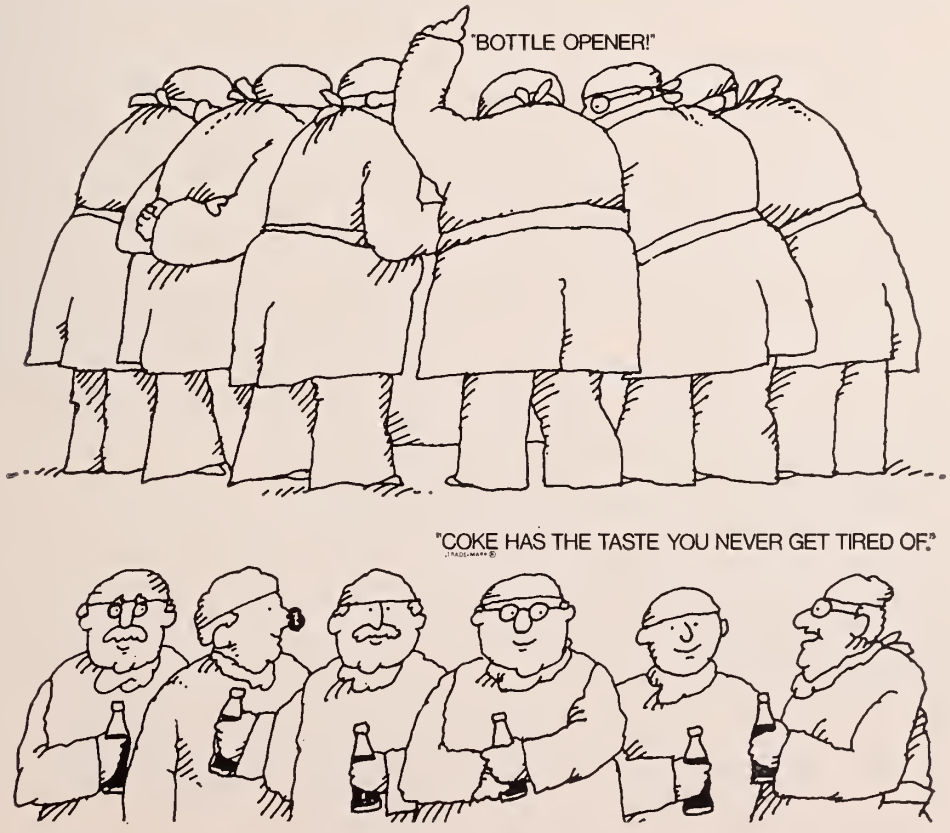
PUBLIC HEALTH PAGE

(*Continued from page 594*)

contributions to this effort with films on subjects in their respective fields of interest.

This program is one of many aspects which are possible in the professional education field. Another is being investigated through a supplemental grant for a pilot project studying the effectiveness and suitability of a programmed-learning slide kit on oral cancer developed at the University of Kentucky School of Dentistry. Other types of "grass-roots" professional education are possible, including assisting community hospitals to benefit from Kentucky's new ETV network.

The Kentucky Medical Association Committee on Medical Education is acting as an advisory group to this Office to assist in determining the direction future efforts should take. However, the most valid and important advice must come from the individual practicing physician. Therefore, it is hoped that every physician will take the opportunity to acquaint himself with this program when it is demonstrated in his area. Since this program is just beginning it can be tailored to the interests and needs of the practicing physician if these are known. It is the sincere hope of those in the project that this effort can provide the stimulus for the establishment of the type of professional education service needed in the Commonwealth.



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County Medical Society Officers For 1968 Reported to KMA

The following list of officers of county medical societies for 1968 has been received at KMA Headquarters, according to the records of the membership department on June 20.

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President: Victor E. Scherer, M.D., Scottsville
Vice President: Owen L. Davis, M.D., Scottsville
Secretary-Treasurer: John M. Hall, M.D., Scottsville
Delegate to KMA: Earl P. Oliver, M.D., Scottsville
Alternate: Victor E. Scherer, M.D.

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President: Paul Pichardo, M.D., Glasgow
Vice President: Fred Cecil, M.D., Glasgow
Secretary: Lewis Dickinson, M.D., Glasgow
Delegate to KMA: W. H. Bryant, M.D., Glasgow
Alternate: Eugene Marian, M.D., Glasgow

Bourbon
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Vice President: A. V. Echiverri, M.D., Paris
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Delegate to KMA: Richard Wever, M.D., Paris
Alternate: James B. Ferrell, M.D.

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Vice President: Kelley Deaton, M.D., Danville
Secretary-Treasurer: F. A. Martin, Jr., M.D., Danville
Delegate to KMA: John Baird, M.D., Danville
Alternate: William Pesci, M.D., Danville

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President: Darl B. Shipp, M.D., Dry Ridge
Vice President: Claude C. Waldrop, M.D., Williamstown
Secretary-Treasurer: Fred R. Scroggin, M.D., Dry Ridge
Alternate: Darl B. Shipp, M.D.

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Delegate to KMA: C. F. Burnett, Jr., M.D., Mayfield
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Secretary-Treasurer: Harry B. Huntsman, M.D.
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Alternates: Charles Fisher, M.D., Madisonville; Kenneth P. Haywood, M.D.

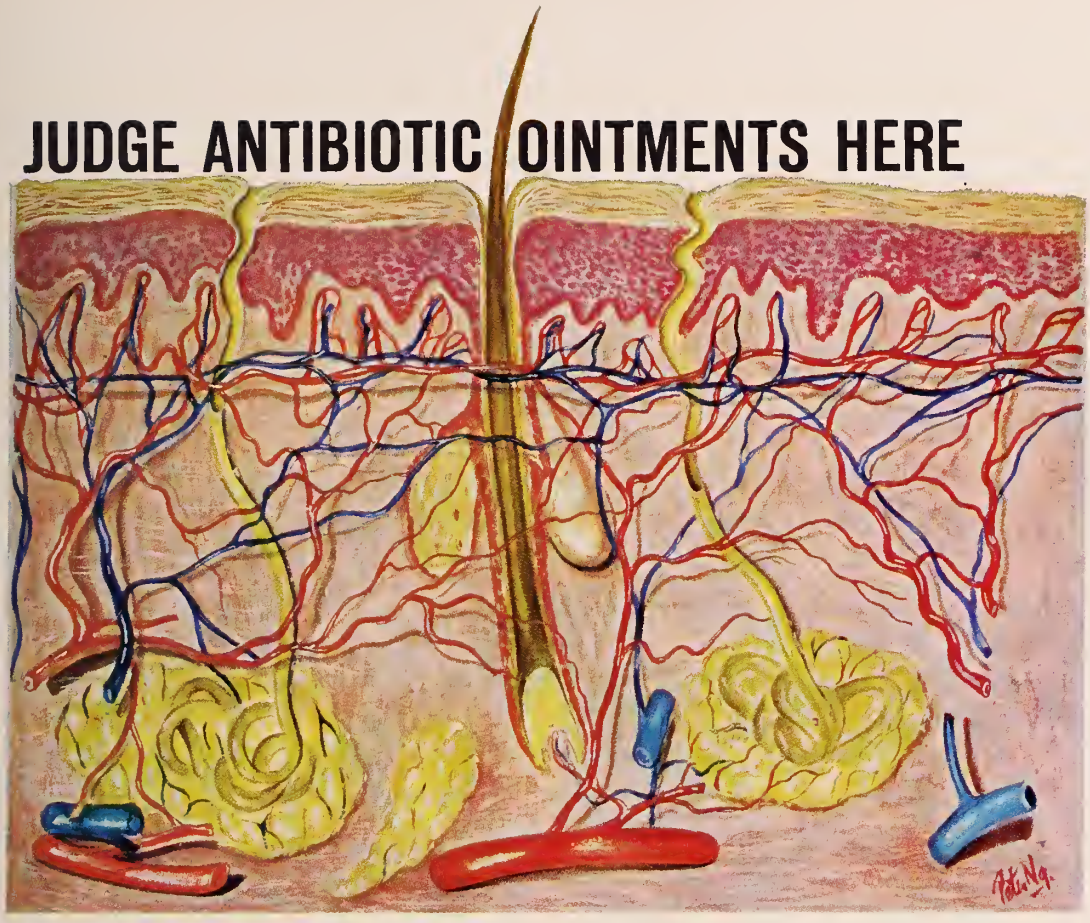
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Delegate to KMA: O. A. Cull, M.D.
Alternate: Maurice Bowling, M.D.

Dr. Hume to Head Co. Med. Soc.

Walter I. Hume, Jr., M.D., Louisville, was recently named president-elect of the Jefferson County Medical Society. Doctor Hume is assistant editor of *The Journal* and an active participant in KMA committee work.

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Caution: As with other antibiotic preparations, prolonged use may result in overgrowth of nonsusceptible organisms and/or fungi. Appropriate measures should be taken if this occurs. Articles in the current medical literature indicate an increase in the prevalence of persons allergic to neomycin. The possibility of such a reaction should be borne in mind.

Contraindications: This product is contraindicated in those individuals who have shown hypersensitivity to any of its components.

Supplied: Tubes of 1 oz., ½ oz. with applicator tip, and ⅛ oz. with ophthalmic tip.

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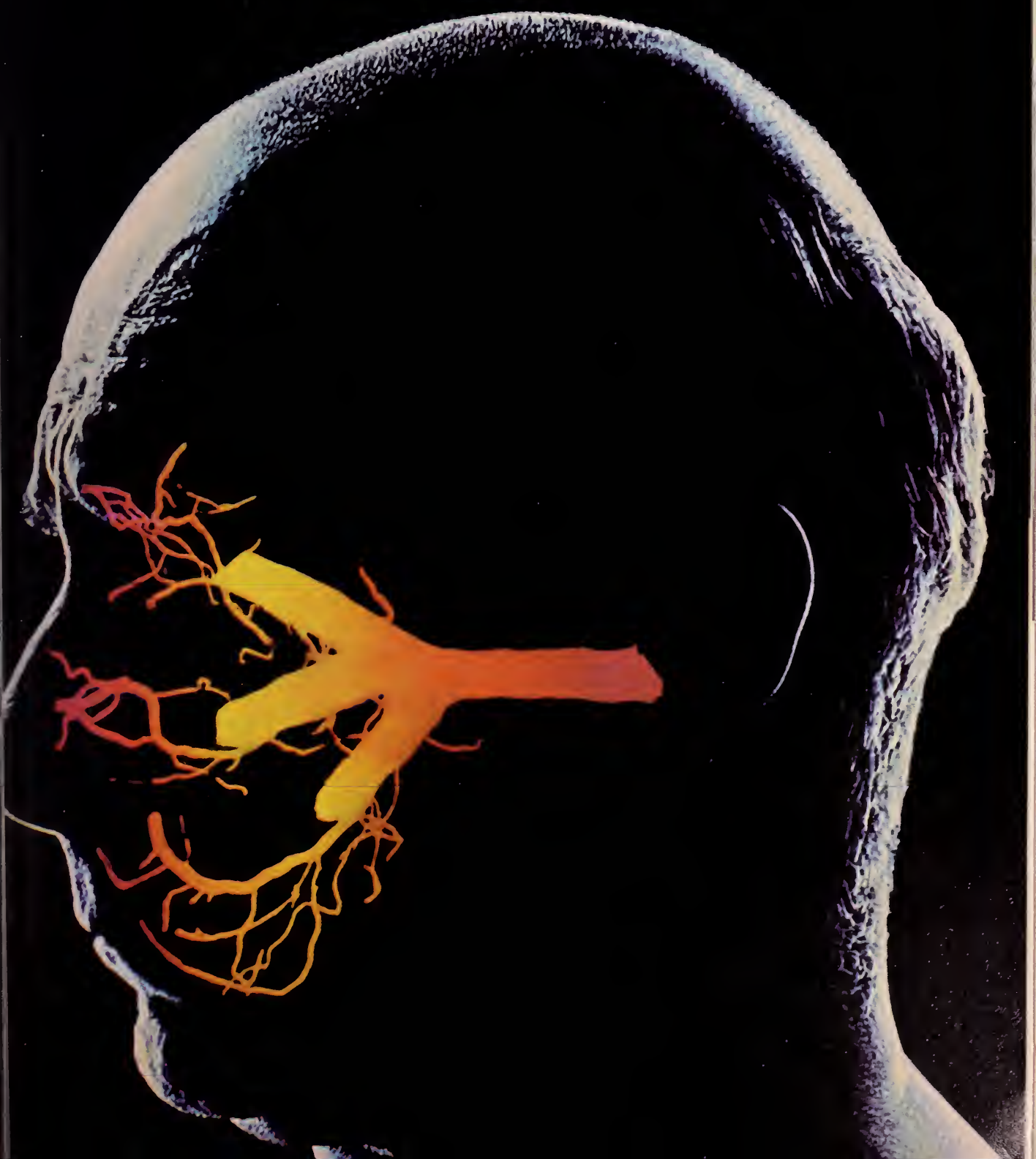
Warning
Fatal cases of aplastic anemia have been reported following treatment with Tegretol. Agranulocytosis, thrombocytopenia and transitory leukopenia have also been observed.
Complete blood and platelet counts should be done prior to and at regular intervals during treatment with the drug (see recommendations under "Important Note and Precautions") to help in the early detection of serious bone marrow injury. Abnormalities in initial blood tests should rule out use of the drug. Also, patients should be made aware of such early toxic signs of a potential hematologic problem as fever, sore throat, mouth ulcers, easy bruising and petechial or purpuric hemorrhage. Should such signs appear, the patient should be advised to discontinue the drug and to report to the physician immediately.

Indication Tegretol is indicated in the treatment of the pain associated with true trigeminal neuralgia. It is not a simple analgesic and should never be administered for relief of trivial facial aches or pains.
Contraindication Do not use in those with a known sensitivity to any tricyclic compound or in those being treated with M.A.O.I. agents. As long a period as possible should elapse before using Tegretol in patients who have been treated with M.A.O.I.'s, with a minimum of 7 days. In such cases, initial dosage should be low and the patient's reaction to gradual increments closely observed.
Important Note and Precautions Familiarity with the clinical symptoms which lead to an accurate diagnosis of true trigeminal neuralgia and with the complete prescribing information, careful patient selection, a thorough examination before treatment and close patient supervision throughout the treatment period are essential to the safe and effective use of this drug.
Where feasible, Tegretol should not be used in conjunction with any potent drug which may increase the possibility of toxic reactions.
In pregnancy, the drug should not be prescribed during the first trimester and thereafter only to patients in whom the clinical situation warrants the potential risk. It should not be administered to nursing mothers.
Patients with increased intraocular pressure should be closely observed during treatment with this drug because of its anticholinergic effect.
Because of the drug's relationship to other tricyclic compounds, the possibility of activation of latent psychosis and, in the elderly, of confusion or agitation, should be considered.
Dizziness and drowsiness may occur and patients should be cautioned about the hazards of operating machinery or automobiles and of engaging in other hazardous tasks.
Use cautiously in patients with a history of coronary artery disease, organic heart disease, congestive failure or liver disease.
Before initiating therapy, the following laboratory procedures should be performed:
1. Complete blood and platelet counts which, if abnormal, should rule out the use of the drug.
2. Baseline evaluations of liver function.
During treatment with Tegretol, the following laboratory procedures should be performed:
1. Complete blood and platelet counts should be done at intervals of one week during the first month of drug treatment, every two weeks during the second and third months, and at monthly intervals thereafter for as long as the patient is taking the drug. A trend toward a decreasing white blood cell count should suggest a dosage reduction and more frequent laboratory and clinical evaluations. Should this trend continue, the d should be discontinued.
2. Liver function tests must be performed at regular intervals during ment with this drug since liver damage may occur during therapy. Th drug should be discontinued immediately in cases of aggravated live dysfunction or active liver disease.
3. Periodic eye examinations, including slit-lamp, funduscopy and ton etry, are recommended for patients being treated with this drug sinc many phenothiazines and related drugs have been shown to cause e changes.
4. Complete urinalysis and BUN should be done on patients treated Tegretol because of observed renal dysfunction.
Adverse Reactions Dizziness, drowsiness, unsteadiness on the feet, nausea, vomiting, aplastic anemia, transitory leukopenia, agranulocyt eosinophilia, leukocytosis, thrombocytopenia, purpura, abnormalities liver function tests, cholestatic and hepatocellular jaundice, urinary f quency, acute urinary retention, oliguria with elevated blood pressure albuminuria, glycosuria, elevated BUN, microscopic deposits in the u impotence, disturbances of coordination, confusion, headache, fatigu blurred vision, transient diplopia and oculomotor disturbances, speec disturbances, abnormal involuntary movements, peripheral neuritis a paresthesias, depression with agitation, talkativeness, nystagmus, tin nitus, paralysis and other symptoms of cerebral arterial insufficiency, pruritic and erythematous rashes, urticaria, Stevens-Johnson syndro photosensitivity reactions, alterations in skin pigmentation, exfoliativ dermatitis, alopecia, diaphoresis, recurrence of thrombophlebitis, er multiforme and nodosum, aggravation of disseminated lupus erythem tosus, gastric distress, abdominal pain, diarrhea, constipation, anore dryness of the mouth and pharynx, glossitis, stomatitis, fever, chills, adenopathy, lymphadenopathy, aching joints and muscles, leg cramp conjunctivitis, left ventricular failure, aggravation of hypertension, hy tension, syncope and collapse, edema, aggravation of coronary arter disease and congestive heart failure. (Whether these cardiovascular are drug-related is not known. However, some of these complication resulted in fatalities.) The necessity for discontinuing the drug shoul dictated by the gravity and severity of the adverse reactions.
Dosage and Administration The drug should always be taken with m if possible.
Initial: One-half tablet (100 mg.) b.i.d. on the first day. Thereafter, the should be increased in one-half tablet (100 mg.) increments every 12 until freedom from pain is achieved. To relieve pain, between 200 mg 1200 mg. per 24 hours may be necessary.
Maintenance: Initial control of pain can be maintained in most patien with a dose of 400 mg. to 800 mg. daily. Maintenance doses may rang between 200 mg. and 1200 mg. daily.
At least once every 3 months during treatment period attempts shoul made to discontinue the drug or to reduce the dose to the minimum effective level.
Availability Round, white, single-scored tablets of 200 mg. in bottle of 100 and 1000. (B)46-82
For complete details, please see Prescribing Information.

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tablet in the morning
work a long diuretic d
in edema and hyperte

HY-611



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usually providing smooth
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Hygroton, brand of chlorthalidone, may mean troublesome side effects for certain patients. And you can't prescribe it in cases of demonstrated hypersensitivity to the drug or in severe renal or hepatic diseases.

Before writing it for your patients, please check the Prescribing Information. It's summarized on the next page.

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in edema and hypertension

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Indications: Hypertension and many types of edema involving retention of salt and water.

Contraindications: Hypersensitivity and most cases of severe renal or hepatic disease.

Warning: With the administration of enteric-coated potassium supplements, which should be used only when adequate dietary supplementation is not practical, the possibility of small bowel lesions (obstruction, hemorrhage, and perforation) should be kept in mind. Surgery for these lesions has frequently been required and deaths have occurred. Discontinue enteric-coated potassium supplements immediately if abdominal pain, distention, nausea, vomiting, or gastrointestinal bleeding occur.

Use with caution in pregnant patients. Since the drug may cross the placental barrier, adverse reactions which may occur in the adult (thrombocytopenia, hyperbilirubinemia, altered carbohydrate metabolism, etc.) are potential problems in the newborn.

Precautions: Antihypertensive therapy with this drug should always be initiated cautiously in postsympathectomy patients and in patients receiving ganglionic blocking agents or other potent antihypertensive drugs, or curare. Reduce dosage of concomitant antihypertensive agents by at least one-half. Barbiturates, narcotics or alcohol may potentiate hypotension. Because of the possibility of progression of renal damage, periodic determination of the BUN is indicated. Discontinue if the BUN rises or liver dysfunction is aggravated. Hepatic coma may be precipitated.

Electrolyte imbalance, sodium and/or potassium depletion may occur. If potassium depletion should occur during therapy, the drug should be discontinued and potassium supplements given, provided the patient does not have marked oliguria.

Take special care in cirrhosis or severe ischemic heart disease and in patients receiving corticosteroids, ACTH, or digitalis. Salt restriction is not recommended.

Adverse Reactions: Nausea, gastric irritation, vomiting, anorexia, constipation and cramping, dizziness, weakness, restlessness, hyperglycemia, hyperuricemia, headache, muscle cramps, orthostatic hypotension, aplastic anemia, leukopenia, thrombocytopenia, agranulocytosis, impotence, dysuria, transient myopia, skin rashes, urticaria, purpura, necrotizing angiitis, acute gout, and pancreatitis when epigastric pain or unexplained G.I. symptoms develop after prolonged administration. Other reactions reported with this class of compounds include: jaundice, xanthopsia paresthesia, and photosensitization.

Average Dosage: 50 or 100 mg. with breakfast daily or 100 mg. every other day.

Availability: White, single-scored tablets of 100 mg. and aqua tablets of 50 mg., in bottles of 100 and 1000.

(B)R2-46-230-D

For full details, please see the complete prescribing information.

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(*Continued from page 640*)

There is at present under the Appalachian Program a plan for Eastern Kentucky running into the millions of dollars for health facilities. There is, I believe, already a five million dollar grant for beginning the program. As I understand it, it is to furnish health facilities and health services. The health facilities for our immediate area of five counties with a population of around 90 thousand, list approximately 250 hospital beds, 100 extended care beds and 200 nursing home beds which I understand are scheduled to be completed within the next five years. The money for this project including the health services I understand will be a least 15 or 20 million and possibly more. This will include home nursing, emergency medical care, including ambulance services and care for emergency cases, psychiatric care and so forth.

I think there will be a marked change in medical care over Kentucky in the near future but I think it is obvious that the biggest and earliest change will be in our Appalachian Area. There will obviously need to be a tremendous number of new health personnel, including nurses, technicians, and social workers as well as doctors. The manner in which this care is supplied in our area may have a far reaching effect on the method of care over the United States in the future. As I say, this is a pilot project and a demonstration project. It is to demonstrate to the country a method of supplying medical care.

I think there is no question but what HEW and most federal agencies feel that medicine should be supplied on a salaried basis with the doctors working for the government. The doctors of the United States I think feel that medical care can be best supplied on a fee for service basis with the doctor working for the patient. I think it behooves us in medicine to try to stay ahead of the government planner, to try to show that medical care can be supplied better by our way of doing things. We probably need to get together, not necessarily in group practice but in working with each other for setting up laboratory and x-ray services or whatever else may be needed to supply the highest quality medical care possible.

As I have said, I think the country as a whole, particularly the federal planners, will be watching the demonstration project in our section of Kentucky.

In conclusion, I feel we need more family doctors. I wonder if part of the answer to more doctors would not be a shorter training period, possibly six years from high school, with three years of college and three years of medical school. The medical school might control the pre-medical level of education and incorporate some of the medical school required courses at that time. I think the medical schools want more well rounded doctors with a broader liberal arts background, and they prefer not to control the pre-medical level and give the medically required subjects in the medical school. I certainly agree with that philosophy, but the fact remains that more doctors have to come from somewhere and I feel rather than training medical assistants, as is being done in some medical schools, that we should have a man with complete medical training, but get the job done in a shorter period of time.

People are demanding more medical care. They are going to be increasingly demanding more medical care. With the average working man retiring earlier and having more free time, plus living longer, he is going to have more time to think of his illnesses. Also, women with more time and money available are going to require more physician hours. Much of this requirement, I feel, can be met by a physician without extended postgraduate time. A lot of this is just the old T.L.C. (tender loving care.) I think if we could supply more of this, we would have less criticism of medicine.

KIMA Installs Dr. Pocock

The Kentucky Industrial Medical Association installed Herman D. Pocock, M. D., Louisville, as its president June 4 at the Holiday Motel Northeast, Henderson, during the group's final spring meeting. Doctor Pocock, who practices at General Electric's Appliance Park, succeeds Walter L. O'Nan, M. D., Henderson.

C. D. Hall, M. D., Aukland, New Zealand, spoke about group practice and socialization of medicine in his country at the meeting.

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Continuing Educational Opportunities

From The

KMA Postgraduate Medical Education Office

FAMILY PLANNING COURSE

SEPTEMBER 5-6

A postgraduate course in family planning, including a discussion of all methods of contraception, will be presented September 5 and 6 by the department of obstetrics and gynecology of the University of Louisville School of Medicine. Jointly sponsored by the Planned Parenthood Association and the Kentucky State Department of Health, the program will feature guest speaker Alan F. Guttmacher, M.D., world authority on family planning and population problems.

In connection with the course, a workshop is planned September 6 on the technics of insertion of intrauterine contraceptive devices. Further information about the course may be obtained from Ronald Levine, M.D., or Walter M. Wolfe, M.D., Louisville General Hospital, 323 East Chestnut St., Louisville 40202.

IN KENTUCKY

SEPTEMBER

7 American College of Physicians, Kentucky and Tennessee Regional, Lexington

24-26 KMA ANNUAL MEETING, Convention Center and Kentucky Hotel, Louisville

26 Kentucky Diabetes Association Annual Meeting, 3:30 p.m., Convention Center, Louisville

IN SURROUNDING STATES

SEPTEMBER

9-11 American EEG Society continuation course in Clinical Electroencephalography, San Francisco, Calif.

13-14 Tennessee Valley Medical Assembly, Memorial Auditorium, Chattanooga, Tenn.

28-Oct. 3 International College of Surgeon's two Western Hemisphere Federations joint meeting, Honolulu, Hawaii

OCTOBER

6 International College of Surgeons Sixteenth Biennial International Congress, Tokyo, Japan

19-24 American Academy of Pediatrics, 37th Annual Meeting, Palmer House Hotel, Chicago, Ill.

31-Nov. 2 American college of Gastroenterology Annual Course in Postgraduate Gastroenterology, Statler Hilton, Boston, Mass.

NOVEMBER

6-7 Cleveland Clinic Educational Foundation Postgraduate Course "Upper Gastrointestinal Tract Disease—Clinical Aspects", Cleveland, Ohio

11-15 American Public Health Association Annual Meeting, Cobo Hall, Detroit, Mich.

18-21 Southern Medical Association Annual Meeting, New Orleans, La.

SEND IN MEETING INFORMATION

Many medical organizations are setting dates for their fall and winter meetings. At the same time they are choosing the topics to be discussed, arranging for speakers and planning programs.

The Continuing Medical Education office of the Kentucky Medical Association would like to urge these societies and organizations to notify this office of these dates and topics so they can be added to the "Continuing Education Opportunities" calendar in *The Journal*. In this way conflicts in dates can be avoided and a wider audience can be informed of these upcoming meetings.

Please send such information, when available, to the KMA Continuing Medical Education Office, 3532 Janet Avenue, Louisville, Ky. 40205.

MEDICAL SCHOOL NEWS AND VIEWS

More on Medical Education†

William Brooks*

SCHOOLS of medicine since their institutionalization have continually changed their basic curriculum in an effort to stay abreast with the increasingly rapid advancement of medical science. The University of Kentucky, too, has made minor adjustments and additions to its basic curriculum as the need arose; but neither faculty nor students deemed these adjustments sufficient. Thus, in the fall of 1967, in view of the students' desires for a more compact, efficient education, and in view of their desires for more educational freedom, a major curriculum change was begun. These changes are divided into two phases: Phase 1 began in the fall of 1967 with the alteration of the freshman course for the entering freshman class, and of the junior course for the new junior class. Phase 2 is to begin in the fall of 1968 and will again involve the same classes, this time in alterations of the sophomore and senior courses. Thus an entirely new curriculum will be functioning by September, 1969. The purpose of this article is to acquaint the reader with those changes already underway and those which will take effect during the summer of this year.

Last fall the entering freshman class embarked upon a curriculum which was not only new to them, but to the pre-clinical instructors. Although the subjects were essentially the same as had been taught previously, they were reorganized and new methods were introduced to make them both more efficient. The freshman curriculum consisted of gross anatomy, histology, behavioral science, cell biology, neuroanatomy, embryology, physiology, and a course called conjoint sciences. Conjoint sciences is designed to meet the students' demand for some clinical exposure with which to correlate their basic science. It has consisted of patient presentation, with subsequent discussion by representatives of relevant basic sciences. The lecture hours for anatomy were reduced, necessitating more concise lectures and better utilization of laboratory time with emphasis placed on pre-dissected material and X-rays. The allowance of more free time gives the student an opportunity to select an elective, set up a research project, or use the additional time for study suited to his needs. Cell biology which formerly had been a second year course was moved up to the freshman year with emphasis on classical genetics, population genetics, microbiology and current research.

The major change to take place in the second year is the combination of the previously separate courses of pathology and medical diagnosis. It is hoped that by correlation of these cornerstones of the practice of medicine the student will better understand both pathology itself and the diagnosis of pathology in the particular patient. And once again, the hours spent in the classroom are being cut in favor of more individualized study.

The junior year, of course, sees the student begin to put into use the principles that he has learned in the first two years of medical school. In order that the student might gain maximum benefit from his selected rotation through the various clinical services, each rotation was lengthened by approximately four to five weeks, and a two-week rotation in the radiology department was included. This increase in time spent per rotation in the junior year allows for the ultimate goal and the most radical curriculum change: an elective fourth year.

With the increased time on the general services in the third year, the student has usually gained much insight into his plans for the future — i.e. specialization, family practice, etc.; he has increased his experience of patients and explored his fund of knowledge— thus, in the senior year, he may select from a number of senior pathways the combination of rotations which he feels is best suited for him. He can select rotations through any specialty or repeat certain courses in which he feels weak. The only requirements are six weeks of gross-dissection anatomy, and a rotation through community medicine, surgery and medicine. He may select up to 18 weeks of elective, of which he can spend all or any part at other medical schools, with local physicians or at undergraduate and graduate schools.

Many may say that this new curriculum is an experiment, and medical education should not be subject to experimentation. Nevertheless, when one thinks of the trend toward specialization and the tremendous gains that medical science is making, is it not the obligation and purpose of medical schools to keep stride with current progress? And how can progress, educational or otherwise, be made without experimentation? Thus, through intelligent experimentation, the University of Kentucky intends to continue its role as an innovative medical college.

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†*This article describes the current revised medical curriculum at the University of Kentucky College of Medicine. Subsequent articles will discuss the research upon which change in medical education must be based and the role of Kentucky medical students and Kentucky physicians in that research.*

**Third year medical student and chairman of the Student Curriculum Evaluation Committee, University of Kentucky College of Medicine, Lexington.*

KENTUCKY MEDICAL ASSOCIATION

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JULY BUYERS GUIDE FOR JOURNAL OF KMA 1968

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Contraindications: Infections caused by nonsusceptible organisms; history of penicillin sensitivity.
Warnings: Acute anaphylaxis (may prove fatal unless promptly controlled) is rare but more frequent in patients with previous penicillin sensitivity, bronchial asthma or other allergies. Resuscitative (epinephrine, aminophylline, pressor amines) and supportive (antihistamines, methylprednisolone sodium succinate) drugs should be readily available. Other rare hypersensitivity reactions include nephropathy, hemolytic anemia, leucopenia and thrombocytopenia. In suspected hypersensitivity, evaluation of renal and hematopoietic systems is recommended.
Precautions: In suspected staphylococcal infections, perform proper laboratory studies including sensitivity tests. If overgrowth of nonsusceptible organisms occurs (constant observation is essential), discontinue penicillin and take appropriate measures. Whenever allergic reactions occur, withdraw penicillin unless condition being treated is considered life threatening and amenable only to penicillin. Penicillin may delay or prevent appearance of primary syphilitic lesions. Gonorrhea patients suspected of concurrent syphilis should be tested serologically for at least 3 months. When lesions of primary syphilis are suspected, dark-field examination should precede use of penicillin. Treat beta-hemolytic streptococcal infections with full therapeutic dosage for at least 10 days to prevent rheumatic fever or glomerulonephritis. In staphylococcal infections, perform surgery as indicated.
Adverse Reactions: (Penicillin has significant index of sensitization): Skin rashes, ranging from maculopapular eruptions to exfoliative dermatitis; urticaria; serum sickness-like reactions, including chills, fever, edema, arthralgia and prostration. Severe and often fatal anaphylaxis has been reported (see "Warnings").
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Indications: Indicated when anxiety, tension and apprehension are significant components of the clinical profile.

Contraindications: Patients with known hypersensitivity to the drug.

Warnings: Caution patients about possible combined effects with alcohol and other CNS depressants. As with all CNS-acting drugs, caution patients against hazardous occupations requiring complete mental alertness (*e.g.*, operating machinery, driving). Though physical and psychological dependence have rarely been reported on recommended doses, use caution in administering to addiction-prone individuals or those who might increase dosage; withdrawal symptoms (including convulsions), following discontinuation of the drug and similar to those seen with barbiturates, have been reported. Use of any drug in pregnancy, lactation, or in women of childbearing age requires that its potential benefits be weighed against its possible hazards.

Precautions: In the elderly and debilitated, and in children over six, limit to smallest effective dosage (initially 10 mg or less per day) to preclude ataxia or oversedation, increasing gradually as needed and tolerated. Not recommended in children under six. Though generally not recommended, if combination therapy with other psychotropics seems indicated, carefully consider individual pharmacologic effects, particularly in use of potentiating drugs such as MAO inhibitors and phenothiazines. Observe usual precautions in presence of impaired renal or hepatic function. Paradoxical reactions (*e.g.*, excitement, stimulation and acute rage) have been reported in psychiatric patients and hyperactive aggressive children. Employ usual precautions in treatment of anxiety states with evidence of impending depression; suicidal tendencies may be present and protective measures necessary. Variable effects on blood coagulation have been reported very rarely in patients receiving the drug and oral anticoagulants; causal relationship has not been established clinically.

Adverse Reactions: Drowsiness, ataxia and confusion may occur, especially in the elderly and debilitated. These are reversible in most instances by proper dosage adjustment, but a also occasionally observed at the lower dosag ranges. In a few instances syncope has been reported. Also encountered are isolated instances of skin eruptions, edema, minor men strual irregularities, nausea and constipation, extrapyramidal symptoms, increased and decreased libido—all infrequent and generally controlled with dosage reduction; changes in EEG patterns (low-voltage fast activity) may appear during and after treatment; blood dys crasias (including agranulocytosis), jaundice and hepatic dysfunction have been reported occasionally, making periodic blood counts and liver function tests advisable during protracted therapy.

Usual Daily Dosage: Individualize for max mum beneficial effects. *Oral*—Adults: Mild and moderate anxiety and tension, 5 or 10 m t.i.d. or q.i.d.; severe states, 20 or 25 mg t.i.d or q.i.d. Geriatric patients: 5 mg b.i.d. to q.i.d. (See Precautions.)

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Annual Meeting Issue

THE JOURNAL

OF THE KENTUCKY MEDICAL ASSOCIATION



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No untoward side effects have been reported to date.

Literature on indications and dosage available on request.

References:

(1) Siver, R. H.: CMD, *21*:109, September 1954. (2) Frykman, H. H.: Minn. Med., *38*:19-27, January 1955. (3) McGivney, J.: Tex. State Jour. Med., *51*:16-18, January 1955. (4) Quehl, T. M.: Jour. of Florida Acad. Gen. Prac., *15*:15-16, October 1965. (5) Weekes, D. J.: N.Y. State Jour. Med., *58*:2672-2673, August 1958. (6) Weekes, D. J.: EENT Digest, *25*:47-59, December 1963. (7) Abbott, P. L.: Jour. Oral Surg., Anes., & Hosp. Dental Serv., 310-312, July 1961. (8) Rapoport, L. and Levine, W. I.: Oral Surg., Oral Med. & Oral Path., *20*:591-593, November 1965.

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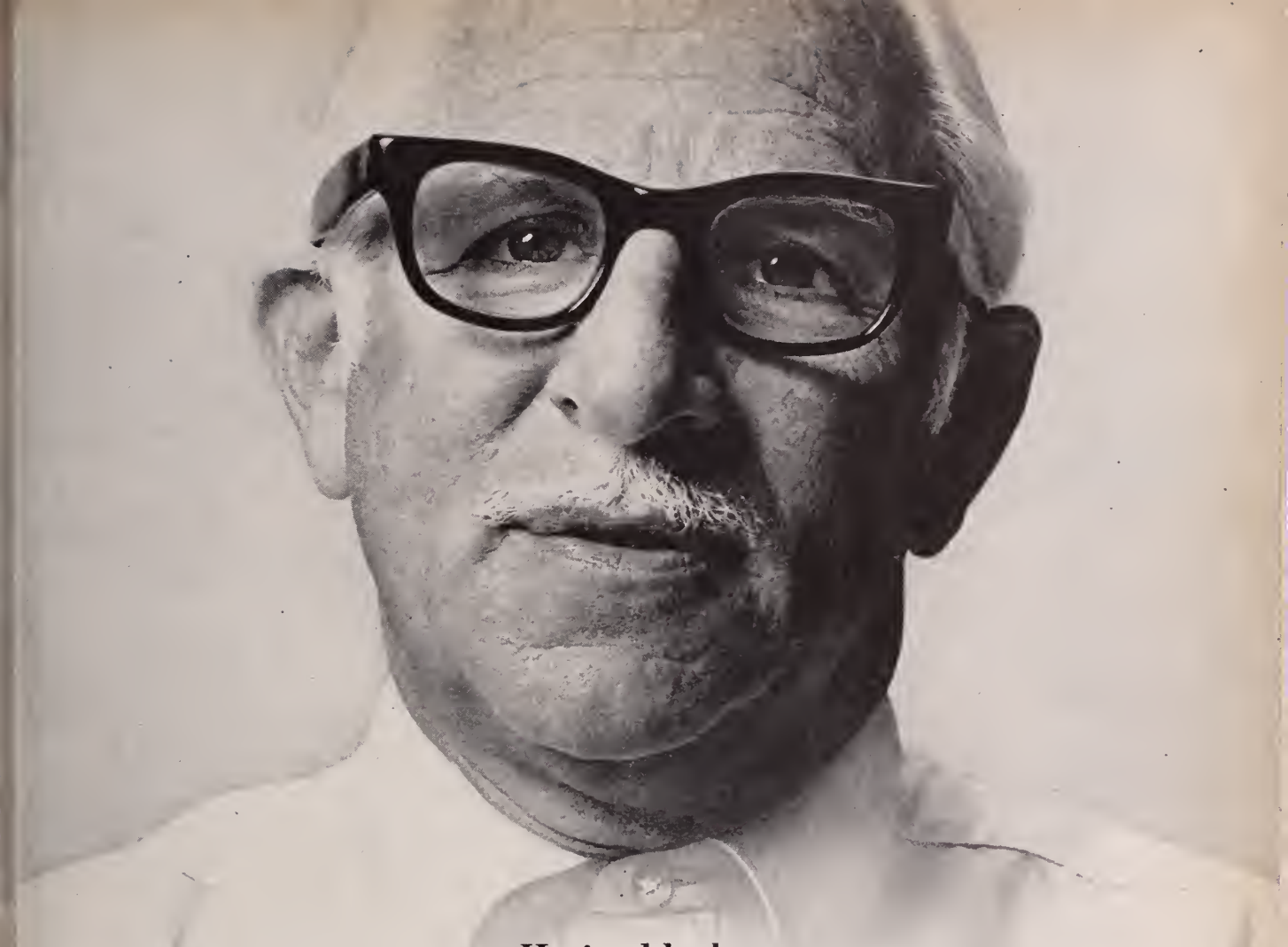
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He is elderly.
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To guard susceptible patients against intestinal monilial overgrowth during broad-spectrum therapy—the protection of nystatin is combined with demethylchlortetracycline in DECLOSTATIN.

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Effectiveness: Because its antibacterial component is DECLOMYCIN Demethylchlortetracycline, DECLOSTATIN should be equally or more effective therapeutically than other tetracyclines in infections caused by tetracycline-sensitive organisms. The antifungal component, Nystatin, protects against superinfection by antibiotic-resistant fungal overgrowth (particularly monilia) in the intestinal tract.

Contraindication: History of hypersensitivity to demethylchlortetracycline or nystatin.

Warning: In renal impairment, usual doses may lead to excessive accumulation and liver toxicity. Under such conditions, lower than usual doses are indicated, and, if therapy is prolonged, serum level determinations may be advisable. A photodynamic reaction to natural or artificial sunlight has been observed. Small amounts of drug and short exposure may produce an exaggerated sunburn reaction which may range from erythema to severe skin manifestations. In a smaller proportion, photoallergic reactions have been reported. Patients should avoid direct exposure to sunlight and discontinue drug at the first evidence of skin discomfort. Necessary subsequent courses of treatment with tetracyclines should be carefully observed.

Precautions: Overgrowth of nonsusceptible organisms may occur. Constant observation is essential. If new infections appear, appropriate measures should be taken. In infants, increased intracranial pressure with bulging fontanels has been observed. All signs and symptoms have disappeared rapidly upon cessation of treatment.

Side Effects: Gastrointestinal system—anorexia, nausea, vomiting, diarrhea, stomatitis, glossitis, enterocolitis, pruritus ani. Skin—maculopapular and erythematous rashes: a rare case of exfoliative dermatitis has been reported. Photosensitivity; onycholysis and discoloration of the nails (rare). Kidney—rise in BUN, apparently dose related. Transient increase in urinary output, sometimes accompanied by thirst (rare). Hypersensitivity reactions—urticaria, angioneurotic edema, anaphylaxis. Teeth—dental staining (yellow-brown) in children of mothers given this drug during the latter half of pregnancy, and in children given the drug during the neonatal period, infancy and early childhood. Enamel hypoplasia has been seen in a few children. If adverse reaction or idiosyncrasy occurs, discontinue medication and institute appropriate therapy. Demethylchlortetracycline may form a stable calcium complex in any bone-forming tissue with no serious harmful effects reported thus far in humans.

Average Adult Daily Dosage: 150 mg q.i.d. or 300 mg b.i.d. Should be given 1 hour before or 2 hours after meals, since absorption is impaired by the concomitant administration of high calcium content drugs, foods and some dairy products. Treatment of streptococcal infections should continue for 10 days, even though symptoms have subsided.

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MESSAGE FROM THE PRESIDENT



Post-Graduate Medical Education

OUR physician forebears had the field to themselves when, in the pleasing Victorian style of 1851, they chartered KMA for "the collection, diffusion, interchange, preservation and general circulation of medical knowledge throughout the State." Today's term is continuing post-graduate medical education," and our concern is now shared by government, welfare workers, labor and industry. As yet, however, we remain a case study in *physician-oriented* post-graduate medical education, as developed by the comparatively few physicians of a poor state.

Our principal mechanism for diffusion is *The Journal.* It has the difficult task of both interchanging scientific information and serving as a house organ for the Association, informing the physician of his changing role in the social environment. Under a series of editors of philosophic bent, personally combining clinical and literary excellence, it has come to stand well in the front rank of state journals.

Our other major effort is our Scientific Program, representing many hours of thoughtful planning by many members. The organized specialty societies cooperate with KMA in using Association funds to secure distinguished speakers. Our medical schools alternate in lending us capable members of their full-time faculties to serve as chairmen of the Program Committee. The other members of the Committee are thoughtfully selected by the Board of Trustees to broadly represent our membership in terms of specialty, geography and type of practice.

The Scientific Program Committee is charged with developing a balanced program of wide interest. In doing this, the Committee draws on specialty group speakers and other appropriate resources. It is interesting to note that only one-sixth of the program time is devoted strictly to specialty presentations. We seem to have an almost subconscious realization that the complete physician, whatever his specialty, needs a reasonable over-view of developments across the entire spectrum of medicine.

On balance, I submit that we discharge reasonably our primary duty. Approximately 40 percent of our members will attend the Scientific Assembly. We can hardly expect greater attendance without neglecting the patients back home.

George F. Brockman

The muscle relaxant that works before you write a prescription

Relieve painful skeletal muscle spasm in your office in minutes with a single 2 cc. injection of NORFLEX. Then, for sustained relief, write a prescription for NORFLEX tablets, 1 tablet b.i.d.

CONTRAINDICATIONS: Due to its anticholinergic action, NORFLEX should not be used in patients with glaucoma, pyloric or duodenal obstruction, stenosing peptic ulcer, prostatic hypertrophy or obstruction at the bladder neck, cardiospasm (megaesophagus) and myasthenia gravis. Use with caution in patients with tachycardia. Do not use propoxyphene (Darvon®) concurrently.

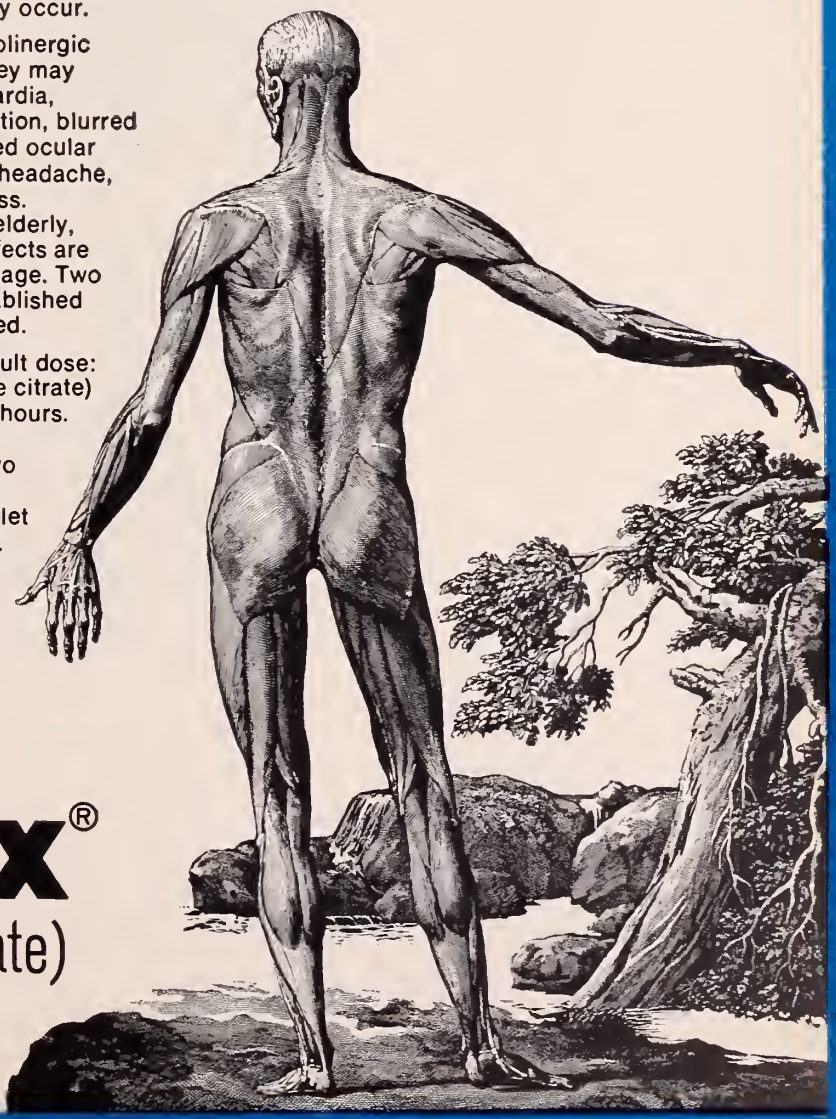
WARNING: Transient lightheadedness or dizziness following NORFLEX-INJECTABLE may occur.

SIDE EFFECTS: Due mainly to anticholinergic action and usually at high dosage. They may include dryness of the mouth, tachycardia, palpitation, urinary hesitancy or retention, blurred vision, dilatation of the pupil, increased ocular tension, weakness, nausea, vomiting, headache, dizziness, constipation, and drowsiness. Infrequently, mental confusion in the elderly, urticaria or other dermatoses. Side effects are usually eliminated by reduction in dosage. Two cases of aplastic anemia, with no established causal relationship, have been reported.

DOSAGE: **INJECTABLE** — Average adult dose: one ampul, 2 cc. (60 mg. orphenadrine citrate) I.M. or I.V. May be repeated every 12 hours. Relief may be maintained with one NORFLEX tablet b.i.d. **TABLETS** — Two tablets per day for adults, one in the morning, one in the evening. Each tablet contains 100 mg. orphenadrine citrate.

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THE INSURANCE PAGE



Our Man in Washington

MEMBERS of the medical profession can take great satisfaction in the fact that the new Medicaid administrator is Francis L. Land, M.D. Doctor Land, a former vice president of the American Academy of General Practice, left a thriving general practice in Fort Wayne, Indiana to become the new Medicaid chief.

This program represents medicine's preferred approach to the funding of medical costs for the needy and medically indigent. It was designed ultimately to eliminate the poverty patient—to obviate the need for charity medicine. Indigent patients are expected to have free access to the full range of medical services available in their communities.

Of great significance in this program is the fact that, for the first time, the basic elements of out-patient practice (home and office care, diagnostic tests, consultations and nursing home care) will be funded by a third party, and medical insurance programs can be expected to follow this direction.

Our voluntary prepayment programs—phenomenally successful as they have been—have nevertheless always been circumscribed by price competition. They have been limited mainly to the coverage of surgical procedures and medical care for hospitalized patients. But now, it should not be long before they write these elementary out-patient medical services into their basic contracts for the general market.

It is hoped that under Doctor Land's leadership prepayment plans and commercial carriers will be invited and encouraged to underwrite Title XIX programs throughout the country on a fixed price insured contractual basis. This will permit the plans and insurance companies to make their maximum contribution to the program and to play a strong and significant role as buffers between government on the one hand and doctors and their patients on the other. It will also bring into play the experience and expertise of these plans in administering programs with top efficiency, thus assuring maximum value for every tax dollar spent.

Doctor Land is an able exponent of the medical profession—in a critically influential place in our federal establishment. We should all follow his leadership and support his efforts to make the Medicaid program work. If Medicaid does not work—and if costs are not reasonably controlled—then the next sure step would be a program operated directly by the federal government.

WILLIAM W. HALL, M.D.

Don't let monilia cut broad-spectrum therapy short...

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Use of broad-spectrum antibiotics can cause fungal overgrowth in the alimentary tract... and give rise to symptoms so troublesome that therapy must be prematurely stopped. Tetrex-F (tetracycline phosphate complex-nystatin) helps you circumvent this problem.

The nystatin can prevent overgrowth of monilia; the phosphate complex delivers tetracycline to the blood rapidly. Side effects are infrequent.

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Tetrex-F (tetracycline phosphate complex-nystatin) is especially useful in patients most susceptible to fungal overgrowth during tetracycline therapy: (1) the elderly or debilitated, (2) young children, (3) the diabetic, (4) those on long-term tetracycline therapy, (5) those on steroid therapy, (6) those who have had moniliasis before, and (7) pregnant patients with a history of monilial vaginitis.

When you start with economical Tetrex-F (tetracycline phosphate complex-nystatin), you can complete the full course of broad-spectrum therapy with less chance of losing control elsewhere. A good start for a healthy finish.

PRESCRIBING INFORMATION. For complete information consult Official Package Circular. *Indications:* Infections of respiratory, gastrointestinal and genitourinary tracts and skin and soft tissues due to tetracycline-sensitive organisms, in patients with increased susceptibility to monilial infections. *Contraindications:* The drug is contraindicated in patients hypersensitive to its components. *Warnings:* Photodynamic reactions have been produced by tetracyclines. Natural and artificial sunlight should be avoided during therapy. Stop treatment if skin discomfort occurs. With renal impairment, systemic accumulation and hepatotoxicity may occur. In this situation, lower doses should be used. Tooth staining and enamel hypoplasia may be induced during tooth development (last trimester of pregnancy, neonatal period and childhood). *Precautions:* Bacterial superinfections may occur. Infants may develop increased intracranial pressure with bulging fontanels. In gonorrheal therapy, serologic tests for syphilis should be conducted initially and monthly for 3 months. *Adverse Reactions:* Glossitis, stomatitis, nausea, diarrhea, flatulence, proctitis, vaginitis, dermatitis, and allergic reactions may occur. *Usual Adult Dosage:* 1 capsule q.i.d. Continue for 10 days in Beta-hemolytic streptococcal infections. Administer one hour before or two hours after meals. *Supplied:* Capsules, bottles of 16 and 100. Each capsule contains tetracycline phosphate complex equivalent to 250 mg. tetracycline HCl activity and 250,000 units of nystatin. For Oral Suspension, 125 mg. tetracycline and 125,000 u. nystatin/5 ml., 60 ml. bottles.

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In addition to its primary indications for duodenal and gastric ulcer, Robinul Forte (glycopyrrolate) is indicated for other G-I conditions that may benefit from anticholinergic therapy. Robinul-PH Forte (glycopyrrolate 2 mg. with phenobarbital) is indicated when these situations are complicated by mild anxiety and tension.

Contraindications: Glaucoma, urinary bladder neck obstruction, pyloric obstruction, stenosis with significant gastric retention, prostatic hypertrophy, duodenal obstruction, cardiospasm (megaesophagus), and achalasia of the esophagus, and in the case of Robinul-PH Forte, sensitivity to phenobarbital.

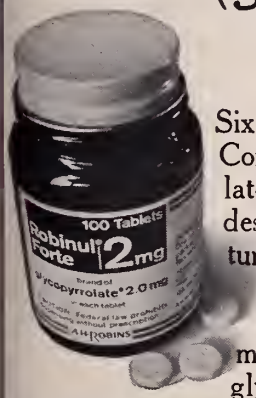
Precautions: Administer with caution in the presence of incipient glaucoma.

Adverse Reactions: Dryness of the mouth, blurred vision, urinary difficulties, and constipation are rarely troublesome and may generally be controlled by reduction of dosage. Other side effects associated with the use of anticholinergic drugs include tachycardia, palpitation, dilatation of the pupil, increased ocular tension, weakness, nausea, vomiting, headache, dizziness, drowsiness, and rash.

Dosage: Should be adjusted according to individual patient response. Average and maximum recommended dose is 1 tablet three times a day; in the a.m., early p.m., and at bedtime. See product literature for full prescribing information.
Supply: Robinul (glycopyrrolate 1 mg.): Robinul Forte (glycopyrrolate 2 mg.): Robinul-PH (glycopyrrolate 1 mg.) with phenobarbital 16.2 mg. (Warning: may be habit forming): Robinul-PH Forte (glycopyrrolate 2 mg.) with phenobarbital 16.2 mg. (Warning: may be habit forming), in bottles of 100 and 500 tablets. A. H. Robins Company, Richmond, Va. 23220.

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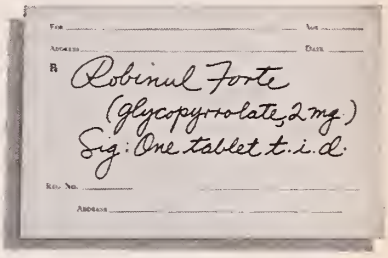
In peptic ulcer therapy, won't you give Robinul® Forte a Fair Trial?
(glycopyrrolate)



Six years ago the A. H. Robins Company introduced glycopyrrolate, a unique anticholinergic agent described in the prescribing literature as more closely approaching the ideal compound for controlling gastric hyperacidity and hypermotility of the G-I tract. Although glycopyrrolate (Robinul Forte) found good acceptance among numerous physicians, many others just didn't seem to want to give it a try, probably because the anticholinergic they were already using was giving acceptable results.

However, we believe you'll agree there's always room for a better anticholinergic. This is why we're asking you to give Robinul Forte a fair trial. Robinul Forte exerts a highly specific antisecretory action and marked inhibitory effect on intestinal tone. We're convinced you'll agree that this is indeed an outstanding drug when you observe its outstanding suppression of ulcer symptoms. Furthermore, it is unique in that it reduces intestinal tone, yet has little or no effect on peristalsis. In addition, the incidence of the more bothersome peripheral side effects is low.

No longer does the physician have to look for extreme dry mouth as the measure of his anticholinergic's effectiveness. The only way we can demonstrate to you firsthand the efficacy of glycopyrrolate (Robinul Forte) is for you to try it in your practice. That's why we're asking you to give it a Fair Trial. How can you give it a Fair Trial? You do it this way:



First: When you see your very next ulcer patient, write him a script as shown.

Next: Wait 10 days or until your patient comes in for his next appointment and get his "verdict" as to how he feels. Examine all the evidence and make your evaluation of his condition.



Finally: Render **your** verdict. If it's "significant improvement and marked relief of symptoms," then we believe you'll agree that Robinul Forte has proved its worth, and we rest our case. If not, consider our case for Robinul Forte closed. That's a Fair Trial, Doctor, and it's all we ask.

Robinul® Forte
(glycopyrrolate, 2 mg.)

The summation is an important part of every case. You'll find ours on the preceding page, Doctor.

From the files of the

COMMITTEE FOR THE

STUDY OF MATERNAL MORTALITY

CASE 30-66. A 23 year old married Negro gravida 2 para 0 was admitted at 9:30 a.m. on November 26, 1966, with complaints of coughing up blood and difficulty in breathing. The temperature was 98°, pulse 120, and respirations 20. Although an x-ray of the chest was ordered, no report could be found by the medical records department. Her expected date of delivery was December 11, 1966.

The blood pressure was 160/80 on admission; three and one-half hours later, it was 160/94 in the right arm and 190/120 in the left arm. She was given ¼ grain morphine sulfate and 4 cc of 50 percent magnesium sulfate, in each hip, and was placed in an oxygen tent. An apresoline drip was started at 20 drops per minute; this was later increased to 30 drops per minute. Despite this medication, her blood pressure remained elevated at 158/110. The rate of the apresoline drip was increased to 40 drops per minute at 6:00 p.m. Her blood pressure became stabilized at 156/100. The fetal heart beat was counted at 10:45 p.m. at 144 per minute. Her blood pressure began to rise 180/110, and her physician was called. She was given ¼ grain morphine. A catheterized urinalysis was sent to the laboratory at 12:45 p.m. At 12:20 a.m., she began coughing up considerable amounts of blood-tinged mucus, and the fetal heart beat was no longer audible.

At 1:00 a.m., another 500 cc infusion of five percent dextrose in water containing one ampule of apresoline was started, and the drip was maintained at 80 drops per minute. The blood pressure was now 168/70, the pulse 100, and respirations 30-40. The patient slept at intervals. Another 500 cc apresoline infusion was started at 2:10 a.m. The blood pressure was 170/68, pulse 102 and respirations 40. The infusion was absorbed at 3:00 a.m. and another was started immediately. She received another ¼ grain of morphine at 4:00 a.m. and a Foley catheter was inserted; 350 cc of urine were obtained. Another 500 cc was started at 4:05 a.m.; the total intravenous fluid intake since admission was now 2500 cc. The blood pressure was 164/66 and respirations 44, and the drip running at 120 drops per minute. The fluid was absorbed by 5:40 a.m. Her physician was notified. He checked the patient at 6:30 a.m. and obtained an electrocardiogram at 7:25 a.m. when her blood pressure was 150/80, pulse 156, and respirations 48. She was given 1 cc of thiomerin intramuscularly and 2 cc of cedilanid. The fetal heart was questionably audible below the umbilicus, but the maternal pulse was so rapid that the counted rate of 164 could have been of either maternal or fetal origin.

At 10:30 a.m. the patient was taken to the operating room since the physician felt that evacuation of the uterus might reverse the pulmonary edema and possibly salvage the infant. Spinal anesthesia was induced with pontocaine, and the patient's head was elevated on pillows. A cesarean section was performed beginning at 11:15 a.m., and a living female infant weighing 7 pounds 6 ounces was delivered at 11:25 a.m. The patient died at 11:40 a.m. The final diagnoses were massive pulmonary edema and toxemia of pregnancy. There was no autopsy.

Comments

The Committee classified this as a direct obstetrical death with preventable factors on the part of the physician. He apparently failed to realize that the patient was in cardiac failure at the time of admission, despite the recorded pulse rate of 120 and the history of dyspnea and hemoptysis. The patient received 2500 cc of intravenous fluids in less than 24 hours despite continued signs of congestive failure. Spinal anesthesia was considered a poor choice for a patient with a labile blood pressure. The initial dose of magnesium sulfate was thought to be too small.



Vacation trip....

Motion sickness?



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ACHROSTATIN® V Capsules
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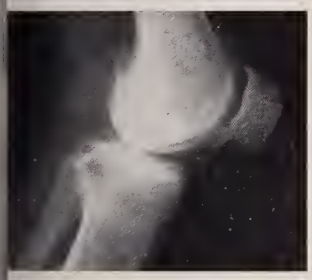
Tandearil® in Osteoarthritis
oxyphenbutazone

Contraindications: Edema; danger of cardiac decompensation; history or symptoms of peptic ulcer; renal, hepatic or cardiac damage; history of drug allergy; history of blood dyscrasia. The drug should not be given when the patient is senile or when other potent drugs are given concurrently.
Warning: Tandearil is an analog of phenylbutazone; sensitive patients may be cross-reactive. If coumarin-type anticoagulants are given simultaneously, watch for excessive increase in prothrombin time. Instances of severe bleeding have occurred. Persistent or severe dyspepsia may indicate peptic ulcer; perform upper gastrointestinal x-ray diagnostic tests if drug is continued. Pyrazole compounds may potentiate the pharmacologic action of sulfonylurea, sulfonamide-type agents and insulin. Carefully observe patients receiving such therapy. Use with caution in the first trimester of pregnancy and in patients with thyroid disease.
Precautions: Before prescribing, carefully select patients, avoiding those responsive to routine measures as well as contraindicated patients. Obtain a detailed history and a complete physical and laboratory examination, including a blood count. The patient should not exceed recommended dosage, should be closely supervised and should be warned to discontinue the drug and report immediately if fever, sore throat, or mouth lesions (symptoms of blood dyscrasia), sudden weight gain (water retention), skin reactions, black or tarry stools or other evidence of intestinal hemorrhage occur. Make complete blood counts at weekly intervals during early therapy and at 2-week intervals thereafter. Discontinue the drug immediately and institute countermeasures if the white count changes significantly, granulocytes decrease, or immature forms appear. Use greater care in the elderly and in hypertensives.
Adverse Reactions: The more common are nausea and edema. Swelling of the ankles or face may be minimized by withholding dietary salt, reduction in dosage or use of diuretics. In elderly patients and in those with hypertension, the drug should be discontinued with the appearance of edema. The drug has been associated with peptic ulcer and may reacti-

Pain Break" for an osteoarthritic.

Tandearil can usually ease it.

At 46, her knees still look good on the outside. But inside, there may be the familiar picture of osteoarthritis.



If aspirin doesn't help, Tandearil often will. Pain and stiffness begin to ease up in 3 or 4 days. You can often maintain response with a daily dose of only 1 or 2 tablets.

Of course, Tandearil is not for every osteoarthritic. Select your patients carefully and follow them in line with the Contraindications, Precautions, Warning, and Adverse Reactions listed below.

But for many aspirin-stubborn osteoarthritics, let Tandearil ease the unwelcome pain breaks of osteoarthritis.

Tandearil®
oxyphenbutazone

e a latent peptic ulcer. The patient should instructed to take doses immediately after als or with milk to minimize gastric upset. g rash occasionally occurs. If it does, mptly discontinue the drug. Agranulocyis, exfoliative dermatitis, Stevens-Johnson drome, Lyell's syndrome (toxic necrotizepidermolysis) or a generalized allergic ction similar to a serum sickness syme may occur and require permanent drawal of medication. Agranulocytosis occur suddenly in spite of regular, reted normal white counts. Stomatitis, sali/ gland enlargement, vomiting, vertigo and guor may occur. Leukemia and leukemoid ctions have been reported. While not defily attributable to the drug, a causal relaship cannot be excluded. Thrombocytopenic purpura and aplastic anemia may occur. Confusional states, agitation, headache, blurred vision, optic neuritis and transient hearing loss have been reported, as have hyperglycemia, hepatitis, jaundice, hypersensitivity, angiitis, pericarditis and several cases of anuria and hematuria. With long-term use, reversible thyroid hyperplasia may occur infrequently. Moderate lowering of the red cell count due to hemodilution may occur.

For complete details, please see full Prescribing Information.

Dosage in Osteoarthritis: Initial: 3 to 6 tablets daily in divided doses. Usually unnecessary to exceed 4 tablets daily. A trial period of one week is considered adequate to determine the therapeutic effect of the drug. Maintenance: Effective level often achieved with 1 or 2 tablets daily, should not exceed 4 tablets daily. In selecting appropriate dosage in any specific case, consideration should be given to the patient's weight, general health, age and other factors influencing drug response.
Availability: Tan, round, sugar-coated tablets of 100 mg. in bottles of 100 and 1000.

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KENTUCKY DIABETES ASSOCIATION

SEPTEMBER 26

The Kentucky Diabetes Association will hold its Seventh Annual Scientific Meeting September 26 in Louisville, according to John B. Selby, M.D., Lexington, president-elect and chairman of the Program Committee.

The morning session, beginning at 10 a.m. in the Mirror Room of the Kentucky Hotel, will feature an illustrated lecture by Robert French, M.D., Lexington, entitled "Experiences with the Kentucky Camp for Diabetic Children." The guest speaker at the 12:30 p.m. luncheon will be Priscilla White, M.D., Boston, Mass.

The Association will have a joint meeting with the Kentucky Chapter, American College of Physicians, at 2 p.m. in Room 203, Convention Center. The program for this meeting appears on page 745.

IN KENTUCKY

SEPTEMBER

5-6 Family Planning Course, University of Louisville School of Medicine, Louisville

7 American College of Physicians, Kentucky and Tennessee Regional, Imperial House, Lexington

13-14 University of Kentucky College of Medicine and Kentucky Division, American Cancer Society Seminar, "Management of Lumps and Bumps," University of Kentucky Medical Center, Lexington

14 Fourth Oral Cancer Symposium, University of Louisville Schools of Medicine and Dentistry, 8:30 a.m.-1p.m., Rankin Amphitheatre, Louisville General Hospital, Louisville

24-26 KMA ANNUAL MEETING, Convention Center and Kentucky Hotel, Louisville

26 Kentucky Diabetes Association Annual Meeting, 3:30 p.m., Convention Center, Louisville

NOVEMBER

12-13 "Small-for-Date Infant Symposium," department of pediatrics, University of Louisville School of Medicine, Stouffer's Inn, Louisville

IN SURROUNDING STATES

SEPTEMBER

7-8 American College of Physicians (Indiana Regional), Stouffers Indianapolis Inn, Indianapolis, Ind.

9-11 American EEG Society continuation course in Clinical Electroencephalography, San Francisco, Calif.

13-14 Tennessee Valley Medical Assembly, Memorial Auditorium, Chattanooga, Tenn.

20 Medical Technology Symposium, Cleveland Clinic Educational Foundation, 9 a.m., Cleveland, Ohio

23-Oct. 4 Laryngology and Bronchoesophagology postgraduate course, University of Illinois College of Medicine, Illinois Eye and Ear Infirmary, Chicago, Ill.

28-Oct. 3 International College of Surgeon's two Western Hemisphere Federations joint meeting, Honolulu, Hawaii

30-Oct. 1 American Medical Association 28th Congress on Occupational Health, Waldorf-Astoria Hotel, New York, N.Y.

OCTOBER

6 International College of Surgeons Sixteenth Biennial International Congress, Tokyo, Japan

CONGRESS ON DISEASES OF THE CHEST

OCTOBER 4-8

The Council on International Affairs of the American College of Chest Physicians will sponsor the Tenth International Congress on Diseases of the Chest October 4-8 at the Washington Hilton Hotel, Washington, D.C.

Highlights of the symposium will include 144 scientific papers on all aspects of cardiovascular and pulmonary diseases, 12 round table luncheon discussions, medical motion pictures, 35 fireside conferences, the Second International Conference on Medical Education, scientific and technical exhibits and the First International Physicians Art Exhibit.

Details available from American College of Chest Physicians, 112 East Chestnut St., Chicago, Ill. 60611

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A simplified approach to the practical management of hypertension



Enduron: (methyclothiazide) A basic building block for mild hypertensives



Excellent day-long Na^+ output, yet easy on the K^+

Enduron provides an excellent starting therapy. Your patient sodium excretion is greatly enhanced. Yet potassium loss is lov

The therapeutic action is smooth, and persists for a full 24 hour With Enduron you can prescribe convenient once-a-day dosag without skimping your patients on day-long thiazide effectivenes

Of course, as with all thiazides, supplemental dietary potassiu should also be considered.

Use Enduron as a basic therapy in patients with mild to mo erate hypertension. A single 5-mg. tablet each day is ample i most cases.

Once a day, every day

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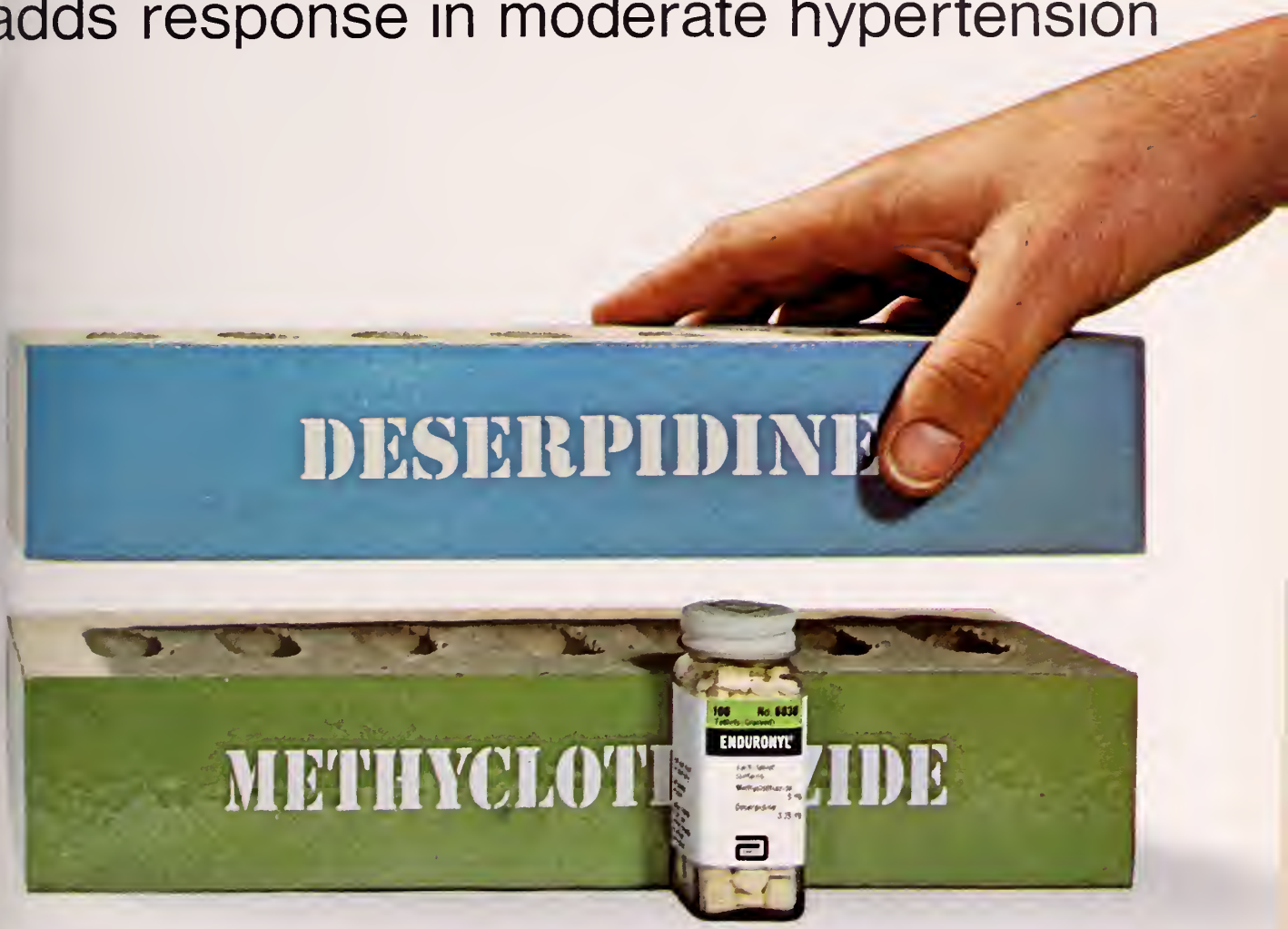
METHYCLOTHIAZIDE

MILD TO MODERATE TO SEVEF



See Brief Summary on final page of advertisement

Enduronyl: Its deserpidine component adds response in moderate hypertension



Less frequent rauwolfia side effects than with reserpine

When you wish to build further response, consider shifting to Enduronyl.

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Enduronyl is available plain or Forte. The latter provides its variation where most helpful, by doubling the deserpidine.

Use Enduronyl for patients throughout the broad range of mild to moderately severe hypertension.

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METHYCLOTHIAZIDE 5 mg. with DESERPIDINE 0.25 mg. or (FORTE) 0.5 mg.

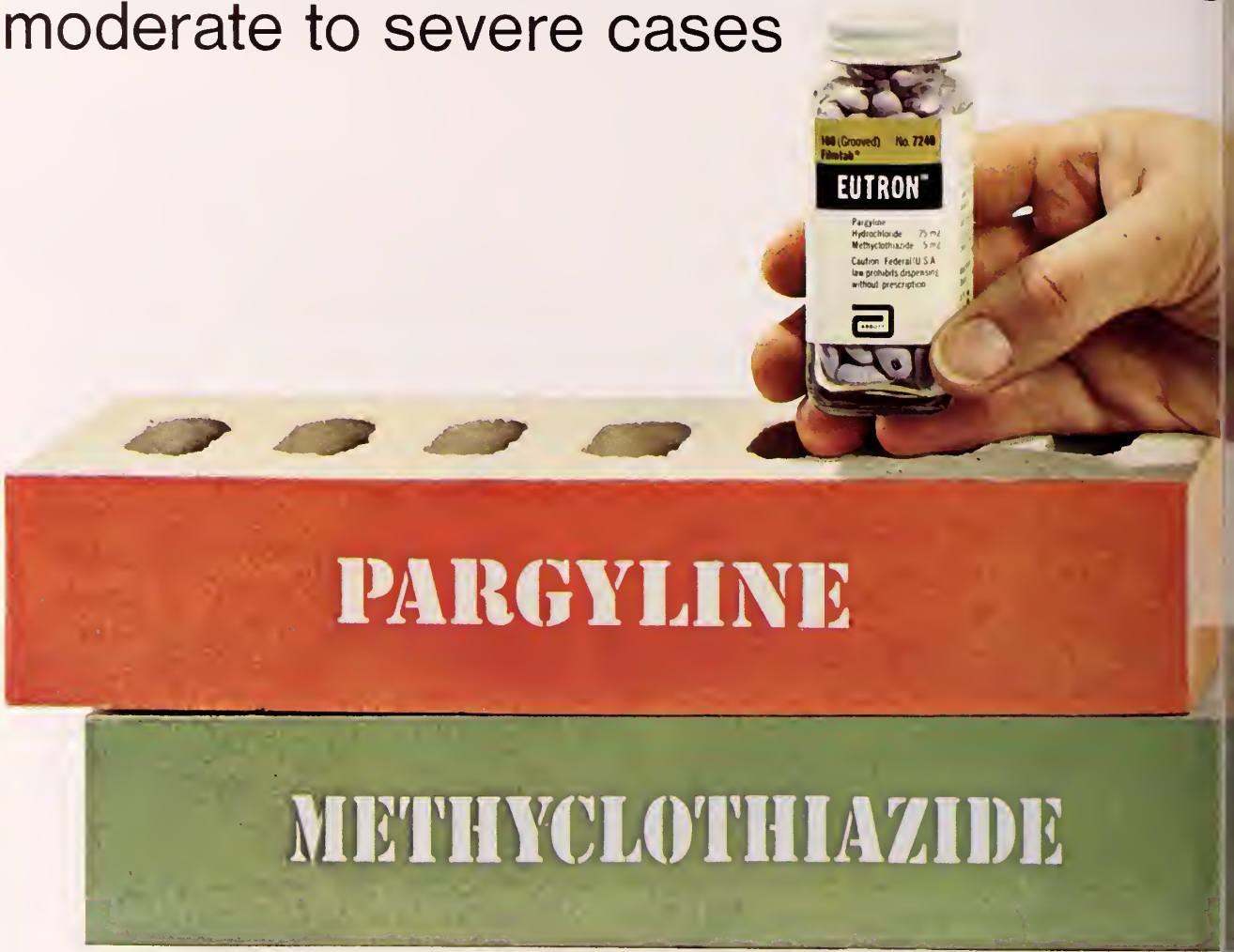
MILD TO MODERATE TO SEVERE



See Brief Summary on final page of advertisement

801094

Eutron: A unique combination for handling moderate to severe cases



Affords almost uniform diastolic reduction in all body positions

Eutron lowers diastolic pressures nearly equally, whether you patient is standing up or lying down.

Thus, in clinical trials, average *standing* diastolic readings wer reduced from 112 pre-treatment to 90 post-treatment; *sitting* fron 115 to 95; and *recumbent* from 112 to 94.

Note that following Eutron, the diastolic reductions were nearl alike in all three body positions.

Use Eutron for managing your moderate to severe cases. It building blocks enhance each other; hence lesser doses often suffice

Once a day, every day

EUTRON™

PARGYLINE HYDROCHLORIDE 25 mg.
with METHYCLOTHIAZIDE 5 mg.

MILD TO MODERATE TO SEVERI



See Brief Summary on final page of advertisement

8010

ENDURON® | ENDURONYL®

METHYCLOTHIAZIDE

Each tablet contains
Methyclothiazide 5 mg. with
Deserpidine 0.25 mg. or 0.5 mg.

Indications: Edema and mild to moderate hypertension (Enduron), and mild to moderately severe hypertension (Enduronyl). More potent agents, if added, can be given at reduced dosage.

Contraindications: Sensitivity to thiazides; severe renal disease (except nephrosis) or shutdown; severe hepatic disease or impending hepatic coma (hepatic coma due to hypokalemia has been reported in patients on thiazides). Do not use Enduronyl in severe mental depression, suicidal tendencies, active peptic ulcer, or ulcerative colitis.

Warnings: Consider possible sensitivity where there is history of allergy or asthma. If added potassium is indicated, dietary supplementation is recommended. Reserve enteric-coated potassium tablets for cautious use only when necessary, as they may induce serious or fatal small bowel lesions (stenosis with or without ulceration), cause obstruction, hemorrhage, and perforation often requiring surgery; discontinue them immediately if abdominal pain, distention, nausea, vomiting, or g.i. bleeding occurs. Neither Enduron nor Enduronyl contains added potassium.

Precautions: Use thiazides cautiously in severe renal dysfunction, impaired hepatic function or progressive liver disease; also in pregnancy (bone marrow depression, thrombocytopenia, and altered carbohydrate metabolism have been reported in certain newborn). In surgery, thiazides may reduce response to vasopressors, and increase response to tubocurarine. Antihypertensive response may be enhanced following sympathectomy. Watch for electrolyte imbalance (e.g., hyponatremia) in all patients. In hypokalemia (especially in digitalized patients) give supplemental potassium. In hypochloremic alkalosis, give supplemental chloride.

Use rauwolfias with caution in patients with history of peptic ulcer. Rauwolfias with anesthetics may produce hypotension and bradycardia. Discontinue Enduronyl two weeks before elective surgery. Consider vagal blocking agents during emergency surgery. In epilepsy, adjust anticonvulsant dosage. In electroshock, shorten stimulus strength and duration. In occasional patients with depressive tendencies, rauwolfias may precipitate severe mental depression that usually disappears when drug is stopped.

Adverse Reactions: Thiazide reaction include blood dyscrasias (thrombocytopenia with purpura, agranulocytosis, aplastic anemia); elevation of BUN, serum uric acid or blood sugar; anorexia, nausea, vomiting, diarrhea, headache, dizziness, paresthesia, weakness, skin rash, photosensitivity, jaundice, symtomatic gout, and pancreatitis. Cutaneous vasculitis in the elderly has been reported with other thiazides. Adverse effects with deserpidine are qualitatively similar to those with reserpine, but their incidence is lower. These include nasal stuffiness, abdominal cramps or diarrhea, nausea, headache, weight gain, reduced libido and potency, peptic ulcer aggravation, epistaxis, skin eruption, asthma in susceptible patients, electrolyte imbalance, excessive salivation, and a reversible Parkinson's syndrome. Excessive drowsiness, fatigue, weakness, and nightmares may signal mental depression. Thrombocytopenia, purpura, and a symptom manifested by dull sensorium, deafness, uveitis, glaucoma, and optic atrophy are rare allergic reactions to other rauwolfias. Hypotension from antihypertensive agents may precipitate angina attacks in susceptible individuals. Usually adverse reactions disappear when drug is withdrawn.

EUTRON™

Each tablet contains
Pargyline Hydrochloride 25 mg.
with Methyclothiazide 5 mg.

Indications—Moderate to severe hypertension.

Contraindications—Pheochromocytoma, paranoid schizophrenia, hyperthyroidism and advanced renal failure. Not recommended in malignant hypertension, children under 12, pregnant patients.

Do not use with: centrally or peripherally acting sympathomimetic drugs; foods high in tyramine (e.g., aged and natural cheeses); parenteral reserpine or guanethidine; imipramine, amitriptyline, desipramine, nortriptyline or their analogues; other monoamine oxidase inhibitors; methyldopa or dopamine; separate Eutron and these agents by two weeks.

Sensitivity to thiazides; severe renal disease (except nephrosis) or shutdown; severe hepatic disease; impending hepatic coma from thiazide-induced hypokalemia.

Warnings—Patients: 1. No other drugs (particularly "cold preparations" and antihistamines), cheese or alcohol without physician's consent. 2. Promptly report orthostatic symptoms, severe headache, other unusual symptoms. 3. Angina pectoris or coronary artery disease patients must not increase physical activity with improved anginal symptoms or well-being.

Physicians: 1. Use antihistamines, hypnotics, sedatives, tranquilizers and narcotics (meperidine contraindicated) cautiously in reduced doses. 2. Stop Eutron two or more weeks before elective surgery; in emergency surgery reduce premedication (narcotics, sedatives, analgesics, etc.) to 1/4 to 1/5; carefully adjust anesthetic dosage to patient response. 3. Use cautiously in advanced renal failure. 4. Pargyline may induce hypoglycemia. 5. Consider possible sensitivity reactions when a history of allergy or asthma is present. 6. If potassium is indicated, dietary supplement is recommended; enteric-coated potassium tablets may induce serious or fatal small bowel lesions (stenosis with or without ulceration), cause obstruction, hemorrhage, and perforation frequently requiring surgery; discontinue medication immediately if abdominal pain, distention, nausea, vomiting or gastrointestinal bleeding occurs; Eutron does not contain added potassium. 7. Possible systemic lupus erythematosus has been reported for thiazides.

Precautions—Pargyline: Use cautiously at reduced dosage: caffeine, alcohol, antihistamines, barbiturates, chloral hydrate, other hypnotics, sedatives, tranquilizers, narcotics. Periodically do urinalyses, blood counts, liver function tests, etc. Use with caution in liver disease. Watch for orthostatic hypotension, especially in impaired circulation (e.g., angina pectoris, coronary artery disease, cerebral arteriosclerosis); also, augmented hypotension in concomitant febrile illnesses. Reduce or discontinue if hypotension is severe. In impaired renal function watch for cumulative drug effects, elevated BUN and other evidence of progressive renal failure; withdraw drug if these persist. In surgery increased central depressant response (hypotension and increased sedative effect) can be controlled by (1) discontinuing at least two weeks prior; (2) in emergency surgery lowering dose of premedication; (3) when necessary, administering a vasopressor. Do not use in hyperactive and hyperexcitable patients. Pargyline may unmask severe psychotic symptoms where emotional problems pre-exist. Use cautiously in Parkinsonism, especially with antiparkinsonian agents. In prolonged therapy, examine for change in color perception, visual fields, fundi and visual acuity. Also, prolonged therapy has made certain patients refractory to nerve blocking effects of local anesthetics.

Methyclothiazide: Use cautiously in severe renal dysfunction, impaired hepatic function or progressive liver disease; also in pregnancy (bone marrow depression, thrombocytopenia, and altered carbohydrate metabolism have been reported in certain newborn). In surgery thiazide may reduce vasopressor response and increase tubocurarine response. Antihypertensive response may be enhanced following sympathectomy. Watch for electrolyte imbalance (e.g., hyponatremia). Give supplemental chloride if hypochloremic alkalosis occurs and supplemental potassium if hypokalemia occurs (especially in digitalized patients). Thiazides may decrease serum P.B.I. without signs of thyroid disturbance.

Adverse Reactions—Pargyline: Orthostatic hypotension and associated symptoms, mild constipation, fluid retention, edema, dry mouth, sweating, increased appetite, arthralgia, nausea, vomiting, headache, insomnia, difficult in micturition, nightmares, impotence, delayed ejaculation, rash, purpura, weight gain, hyperexcitability, increased neuromuscular activity and other extrapyramidal symptoms. Drug fever is extremely rare. Reduction in blood sugar and hypoglycemic effects are possible. Congestive heart failure has been reported in a few patients with reduced cardiac reserve.

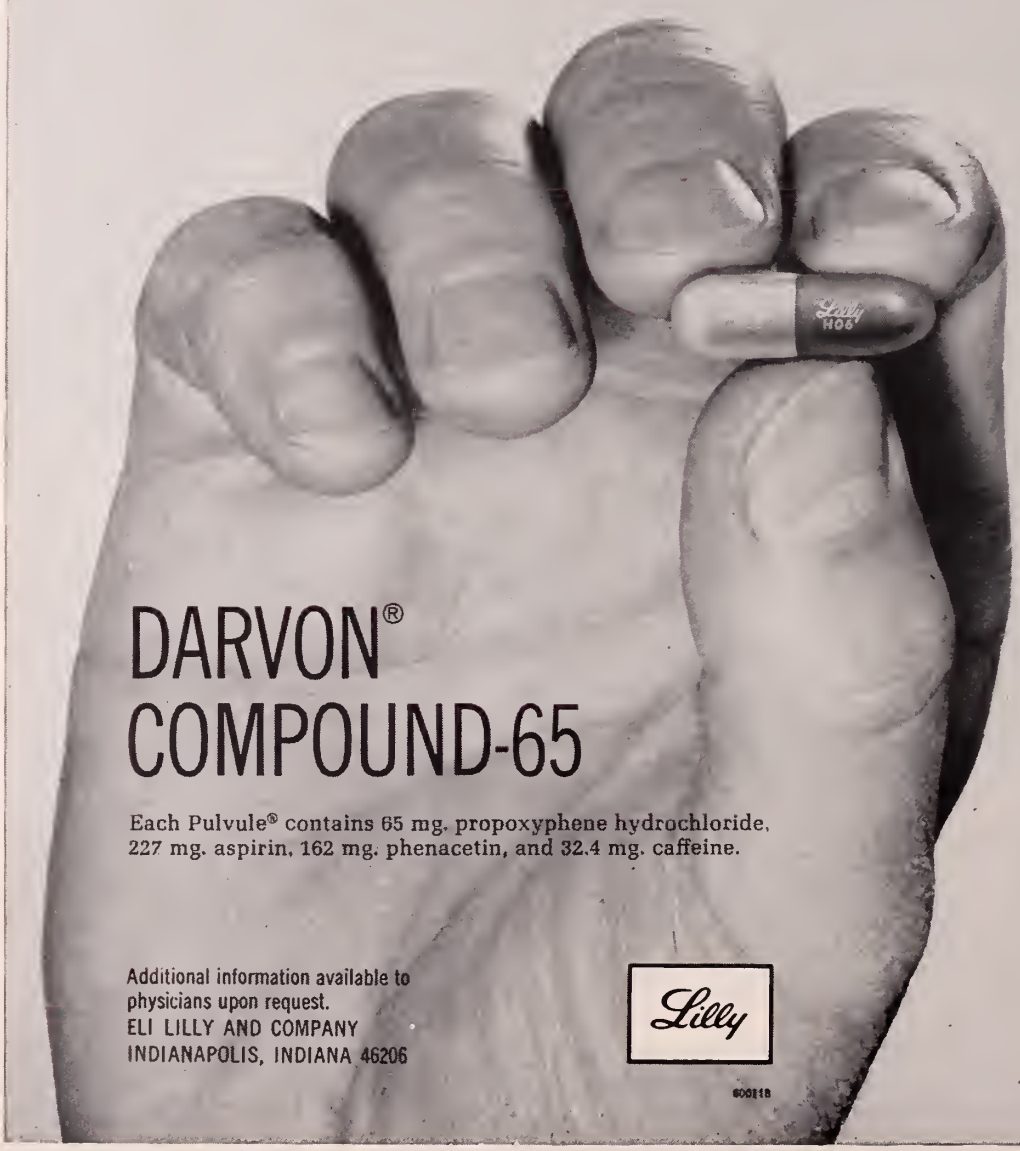
Methyclothiazide: Blood dyscrasias (thrombocytopenia with purpura, agranulocytosis, aplastic anemia); elevation of BUN, blood sugar or serum uric acid (gout may be induced); anorexia, nausea, vomiting, diarrhea, headache, dizziness, paresthesia, weakness, skin rash, photosensitivity, jaundice and pancreatitis. Cutaneous vasculitis in elderly patients has been reported with other thiazides.

If side effects are severe or persist, reduce dosage or withdraw drug. 804438R

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Kentucky Medical Association

Issued Monthly Under The Direction Of The Board Of Trustees

Volume 66 AUGUST 1968 No. 8

Permanent Cardiac Pacemakers

Thoracotomy Versus Transvenous Implantation†

J. Kent Trinkle, M.D.,* Lester R. Bryant, M.D.,**
Richard C. Wood, M.D.,*** and Ralph Shabetai, M.D. ****
Lexington, Kentucky

Permanent cardiac pacemakers can be safely and effectively implanted under local anesthesia by the transvenous technique. There is now no indication for performing a thoracotomy as the primary operation for complete heart block.

IN COMPLETE heart block the atrioventricular node fails to conduct impulses from the atria to the ventricles, and a focus below the AV node initiates each ventricular contraction. If the pacemaker focus is in or near the AV node, the QRS complex is normal and the heart rate approximately 60/minute; however, the new pacemaker often is in the distal conduction system and results in a bizarre QRS complex, with a heart rate between 20 and 45/minute. Complete heart block may be temporary due to digitalis toxicity, electrolyte imbalance or acute myocardial infarction. Permanent heart block usually is acquired late in life and, although the etiology is unknown, it may be due to atherosclerosis of the right coronary artery or fibrosis of the conduction system. Patients with complete heart block may present with congestive heart failure, due to the slow rate and low cardiac output, or with syncope which can terminate in sudden death. The one-year mortality rate is 50 percent in patients treated with drugs alone.[1,2]

Permanent cardiac pacemaking can be accomplished by implanting a small pacemaker in the subcutaneous tissue attached to an electrode in contact with the heart. The pacemaker delivers electrical impulses at a fixed rate, and each impulse initiates ventricular contraction. The electrode is sutured to the epicardium via a left thoracotomy, or is wedged into the apex of the right ventricle by passing it transvenously under local anesthesia. During the past five years 41 patients have had permanent cardiac pacemakers implanted at the University of Kentucky Medical Center—15 by thoracotomy and 26 transvenously.

Methods

From December, 1962, through December, 1967, 41 patients had a permanent cardiac pacemaker implanted. Each patient had a temporary electrode inserted through a systemic vein into the right ventricle with an external generator controlling the cardiac rate until the permanent pacemaker was implanted. The first 15 patients, through December 1965, underwent a thoracotomy and permanent electrodes were sutured to the ventricular

†*Presented at the Annual Meeting of the Kentucky Chapter, American College of Surgeons, April 5, 1968*
**Assistant professor, division of cardiothoracic surgery, department of surgery, University of Kentucky Medical Center, Lexington*
***Associate professor and director, division of cardiothoracic surgery*
****Instructor, division of cardiothoracic surgery*
*****Associate professor, division of cardiology*

myocardium.[3] The last 26 patients, since January, 1966, had the permanent pacemaker electrode implanted into the apex of the right ventricular cavity via the external jugular vein with fluoroscopic guidance and local anesthesia.[4,5] Figures 1 and 2 illustrate the transvenous pacemaker and implantation technique.

Results

Follow up data have been obtained on 36 of the 41 patients either by personal examination or from the referring physician. Three patients with thoracotomy and two with transvenous pacemakers were lost to follow up. The preoperative findings and postoperative results are summarized in Tables 1-5.

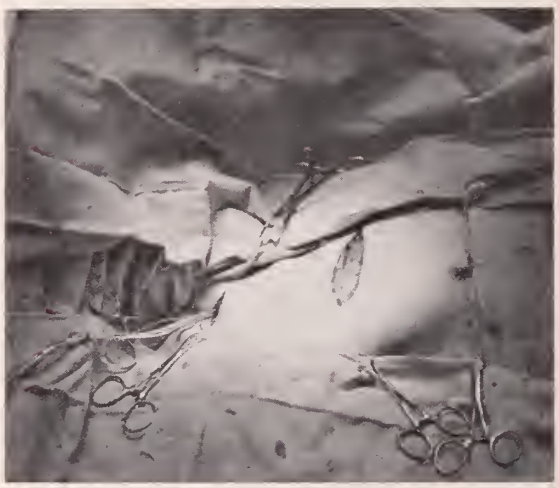


FIGURE 1. Separate incisions have been made in the right lower neck to isolate the external jugular vein and over the right upper chest to implant the pacemaker generator.

Discussion

The average age of the 41 patients was 69 years, which in addition to heart disease, places this group in a high risk category for any operative procedure. There were 20 males and 21 females. Only two of the 41 patients were Negroes. The systolic hypertension of 164 mm Hg. is due to bradycardia with an increase in cardiac filling and stroke volume. After pacemaker implantation the average systolic pressure decreased 30 mm Hg. The



FIGURE 2. The bipolar catheter electrode is passed via the external jugular vein and then attached to the pacemaker generator after removing the guide wires.

average preoperative heart rate of 42/minute, is artificially high since several patients had intermittent AV block or were being treated with isoproterenol on admission. The average postoperative 10 LB. weight loss reflects diuresis and loss of edema resulting from improved cardiac function with pacing—only one patient gained weight postoperative.

The preoperative laboratory data in Table 3 revealed a high incidence of abnormal blood urea nitrogen, due in part to low cardiac output and decreased renal blood flow. Excluding two known diabetics and five patients with intravenous fluids, only two of 34 patients had a normal fasting blood sugar and only 11 of 34 had an FBS below 110 mg%. The electrolyte pattern varied according to the severity of congestive heart failure and the use of diuretics prior to admission, however, the CO_2 combining power was frequently low and the chloride high, indicating metabolic acidosis.

Table 1 lists the duration and frequency of symptoms and physical findings. Only six of the 41 patients were symptomatic less than 30 days. The most frequent symptom was syncope (31) with transient loss of consciousness or seizure. Symptoms of heart failure—dyspnea, orthopnea and nocturnal dyspnea—oc-

TABLE 1
Symptoms and Physical Findings

SYMPTOMS		DURATION OF SYMPTOMS		PHYSICAL EXAMINATION	
Syncope	31	0 to 7 days	3	Systolic murmur	26
Heart Failure	22	7 to 30 days	3	Rales or wheezes	20
Angina	5	30 days to 1 year	23	Impaired sensorium	18
Dizzyness	4	more than 1 year	12	Enlarged Liver	15
Other	5			Peripheral edema	13

TABLE 1 summarizes the symptoms, abnormal physical findings and duration of symptoms of 41 patients with heart block. Most patients had more than one symptom and abnormal physical finding.

TABLE 2
Preoperative Patient Data and Vital Signs

PARAMETER	AVERAGE	RANGE	COMMENTS
AGE	69 yr.	54-83 yr.	9 under 65 yr. & 9 over 75 yr.
SEX	21 Female	20 Male	
RACE	39 White	2 Negro	12% of admissions are Negro
SYSTOLIC BP	164 mm Hg.	110-240 mm Hg.	Postoperative 134 mm Hg. Ave.
DIASTOLIC BP	72 mm Hg.	20-105 mm Hg.	Postoperative 86 mm Hg. Ave.
HEART RATE	42/min.	22-82/min.	Postop. 74/min & 65-80/min.
POSTOP. WGT. CHANGE	minus 10 LB.	2 to —33 LB.	Only 1 patient gained weight

TABLE 2 lists the average and range of vital statistics and signs of 41 patients with permanent cardiac pacemaker implantation.

curred in 22. Angina was present in five patients and was absent postoperatively in four and improved in one. Four patients had "dizzy spells"—a mild type of syncope.

The most frequent abnormality on physical examination was a systolic flow murmur at the cardiac base due to the slow rate and increased stroke volume. The murmur usually disappeared with pacing. The pulmonary rales and wheezes, enlarged liver, and peripheral edema reflect congestive heart failure with low cardiac output. Frequently a patient who was confused or nearly moribund preoperative had a markedly improved sensorium after the pacemaker was inserted and cardiac output increased.

Table 4 indicates the type and incidence of EKG and X-ray abnormalities. Some type of AV block was present in 40 of the 41 patients: complete—34, intermittent complete—4, and 2:1 block—2.

Only seven patients had a normal chest x-ray. Cardiomegaly was present in 27, increased vascular markings in eight, and pleural effusion in eight. These changes are compatible with congestive heart failure due to bradycardia.

Table 5 summarizes the postoperative results of pacemaker implantation by thoracotomy versus the transvenous route. There were no operative or hospital deaths in the 26 patients with a transvenous pacemaker implanted under local anesthesia, compared to two deaths in 15 patients with a pacemaker implanted by thoracotomy under general anesthesia. There were three late deaths in each group and five patients have been lost to follow-up—an ominous sign in this age group. The survival rate and reoperation rate were calculated from the total number of follow-up months all patients had a specific type of pacemaker, divided by the number of deaths and reoperations. The average life expectancy of the 69 year old general population is 146 months.[6] With heart block and a transvenous pacemaker life expectancy is 94.7 months, and with a thoracotomy pacemaker 64.2 months. If the five patients who are lost to follow-up are dead, as suspected, the difference between thoracotomy and transvenous pacemakers would be even greater.

The reoperation rate also was lower in the transvenous group—once every 23.7 months compared to 16.0 months. Of the original 15 patients treated by thoracotomy, only one is still living with a thoracotomy pacemaker in place. Five are dead, six are living after being converted to a transvenous when the

TABLE 3
Preoperative Laboratory Data

	AVERAGE	RANGE	COMMENT
HCT	43%	31-54%	
WBC	8,800/mm^3	3,600-15,400/mm^3	
BUN	30mg%	9-122mg%	3 were 15mg% or lower
FBS	119mg%	90-164mg%	2 below 100mg% & 11 below 110mg% (5 with intravenous fluids & 2 diabetics excluded)
Na	140meq/1	128-150meq/1	Low due to diuretics
K	4.1meq/1	2,8-7.2meq/1	Low due to diuretics
Cl	101meq/1	93-116meq/1	
CO_2	22meq/1	12-32meq/1	23 below 24mg%
URINE	RBC 14, PROTEIN 13	Casts 9	25 abnormal

TABLE 3 lists the average and range of preoperative laboratory studies from 41 patients undergoing permanent cardiac pacemaker implantation.

TABLE 4
Electrocardiogram and Chest X-ray

EKG		X-RAY	
Fixed Complete AV Block	34	Cardiomegaly	27
Intermittent Complete AV Block	4	Pulmonary Congestion	8
2:1 AV Block	2	Pleural Effusion	8
Sinus Bradycardia	1	Normal	7

TABLE 4 lists the EKG pattern and chest x-ray abnormalities in 41 patients receiving a permanent cardiac pacemaker. Some type of atrioventricular block was present in 40 patients, and one patient had syncope due to severe sinus bradycardia which was resistant to drug therapy.

TABLE 5
Postoperative and Follow-up Data

	THORACOTOMY	TRANSVENOUS
Operative Deaths	2 of 15	0 of 26
Late Deaths	3 of 10 (3 no follow-up)	3 of 24 (2 no follow-up)
Complications	4 of 13 survivors	3 of 26
Average Survival Rate* Per Patient-month	64.2 mo. (5 deaths in 321 P.M.)	94.7 mo. (3 deaths in 284 P.M.)
Reoperative Rate Per Patient-month	16.0 mo. (20 oper. in 321 P.M.)	23.7 mo. (12 reoper. in 284 P.M.)
Results & Type of Pacemaker at death or follow-up	1 Living—Thoracotomy 6 Living—Transvenous 5 Dead—Thoracotomy 1 Unknown—Thoracotomy 2 Unknown—Transvenous	21 Living—Transvenous 3 Dead—Transvenous 2 Unknown—Transvenous
Average Life Expectancy at 69 yr.	12.2 yr. or 146 mo.	

TABLE 5 lists the results and present status of 41 patients treated by pacemaker implantation—15 implanted by thoracotomy and 26 implanted tranvenously. P.M. (patient months) refers to the total months all patients had a pacemaker functioning and therefore were at risk of death or mechanical failure and reoperation. After January, 1966, all thoracotomy pacemakers that failed were replaced with transvenous pacemakers.
*Five patients with no follow-up are excluded.

thoracotomy pacemaker failed, and the fate of three is unknown. However, 21 of 26 patients with transvenous pacemakers are living, three are dead, and two are unknown.

Conclusions

The results are reviewed of 41 patients with heart block, treated by permanent cardiac pacemaker implantation at the University of Kentucky Medical Center, during a five-year period. A thoracotomy with general anesthesia was performed in 15 patients, and transvenous implantation with local anesthesia was used in 26. The transvenous pacemaker was found to be superior in morbidity, complications, early and late mortality rate, and incidence of reoperation for mechanical failure. There is now no indication for performing a thoracotomy as the primary operation for permanent cardiac pacemaker implantation.

References

1. Friedberg, C. K., Donoso, E., and Stein, W. G.: Non-surgical acquired heart block. *Ann. New York Acad. Sc.* 111:835, 1964.
2. Curd, G. W., Jr., Dennis, E. W., Jordan, J., McNamara, D., Montero, A. C., Peterson, P. K., Pruitt, R. D., and Schnur, S.: Etiology of atrioventricular heart block. A study of its relevance to prognosis and pacemaker therapy. *Bull. of Cardiovas. Res. Center, Texas Medical Center* 1: 63, 1963.
3. Chardack, W. M., Gage, A. A., and Greatbach, W.: A transistorized self-contained, implantable pacemaker for the long-term correction of complete heart block. *Surgery* 48: 643, 1960.
4. Chardack, W. M.: A myocardial electrode for long-term pacemaking. *Ann. New York Acad. Sc.* 111: 893, 1964.
5. Chardack, W. M., Gage, A. A., Federico, A. J., Schimert, G., and Greatbatch, W.: Five years clinical experience with an implantable pacemaker: An appraisal. *Surgery* 58: 915, 1965.
6. *U.S. Bureau of the Census Statistical Abstract of the United States* 87: 56, 1966, Washington, D.C.

Management of Acute Injuries of the Upper Extremity

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A systematic approach for evaluation of the injured extremity is presented. Indications for and methods of skin replacement, bony fixation, nerve and tendon repair are presented. The importance of maintaining supple joints is stressed.

INJURIES of the upper extremity are rarely life threatening, yet disability from residual deformity profoundly alters living. Initial treatment of the injury is directed at restoring functional units as indicated, obtaining primary healing with minimal scar tissue formation and providing an optimum environment for subsequent surgery as needed. Systematic evaluation of the injury facilitates accurate assessment. Of course, the sine quo non of repair is viability of the injured part. Techniques for re-establishment of vascular continuity are detailed elsewhere.[1,2] After confirming viability, our initial examination is tissue oriented, i.e., skin, bone, joint, nerve and tendon. Surgical reconstruction is similarly oriented, systematically progressing through each tissue complex until restoration of motor unit function can be re-established by repair, transfer or grafting of tendons.

Basic evaluation of each tissue system demands answers to at least the following questions. Is direct wound closure precluded by skin loss? If direct closure is not feasible, is pedicle flap or split graft coverage indicated? What bones are fractured, the relative positions, particular problems the fractures may present and type of fixation required? Are nerves severed, contused or avulsed? And finally, which tendons are divided, where and under what circumstances, in order to select primary or secondary tendon repair? Each subject area will be developed through illustrated discussion. If there is no skin loss, fractured bones or severed nerves, one immediately bypasses these areas of concern and concentrates on management of the severed tendons.

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Skin Loss

When significant skin loss precludes wound closure, skin coverage can be accomplished by use of free grafts or pedicle grafts. Table I categorizes the types of skin coverage available and indications for use. Free grafts are those completely detached from the donor site and include split, full thickness and composite tissue grafts. The split graft provides epithelium and a partial thickness of the underlying dermis. Since skin appendages remain in the donor site, the latter heals by epithelialization and contraction. Full thickness grafts transfer epithelium and a full complement of underlying dermis including skin appendages. Consequently, the donor site must be closed either directly or with a split graft. Composite grafts transfer in continuity, tissues other than skin, i.e., cartilage.

Split grafts are utilized when subcutaneous tissue or muscle is exposed in the depths of the wound and direct closure of the skin edges is not feasible. (Figure 1) Increasing the thickness of split grafts increases the amount of dermis transferred, thereby providing more functional padding. Epithelium (primarily water) contributes little tensile strength, whereas the dermis (primarily interlacing bundles of collagen) determines a tissue's functional capabilities regarding stress-strain. Yet the thicker the free graft, the greater chance of graft failure. Split grafts of 18-24/1000 inch thickness provide sufficient dermis, unassisted healing of the donor site, and minimal risk of failure. The free full thickness graft can be used in clean acute wounds where function demands extra "padding", i.e., pulp of digits and palm. The composite graft is rarely used in

TABLE 1
Skin Coverage

TYPE	ELEMENTS	INDICATIONS	SOURCE
Free Grafts			
Split Thickness	Epithelium Portion of Dermis	Exposed Muscle or Subcutaneous Tissue	Usually thighs, buttocks, back, etc.
Full Thickness	Epithelium All of Dermis Skin Appendages		Supraclavicular, axilla, groin, medial thigh
Composite	Epithelium Dermis Subcutaneous Tissue and Contents	Not indicated in extremity repair	Ear
Pedicle Grafts			
Full Thickness	Epithelium Dermis Skin Appendages Subcutaneous Tissue Neurovascular elements	Exposed tendon, bone, joint, or major neurovascular elements	Distant—chest, abdomen, opposite extremity Local—cross finger, island pedicle, etc.

acute injury and is not indicated in hand injuries.

The pedicle graft (flap) remains attached to the patient, the pedicle of attachment transporting the arterial and venous systems necessary to maintain flap viability. This pedicle may range from an isolated artery and vein (island pedicle) to a broad flap of skin containing numerous fine capillaries but no major vessels. The flap transfers a full complement of epidermis and underlying dermis and, of particular importance, a layer of subcutaneous tissue and fat. (Figure 2)

Neural elements, motor and/or sensory, may be maintained to a flap permitting transfer of innervated skin or muscle, its viability and functional capacity being maintained through the intact neurovascular pedicle.

Pedicle flap usage is indicated when local tissue loss precludes adequate coverage of tendons, bones, joints and neurovascular elements, as will be discussed below. (Figure 3)

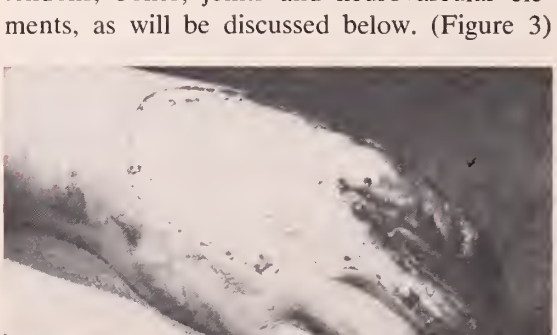


FIGURE 1. Primary excision of third degree burn exposes a thin film of subcutaneous tissue covering the extensor tendons. Split grafts provide adequate coverage.

The premise for motor function is gliding of tendons free of restrictive adhesions. Tendons are encircled by a specialized structure, paratenon, to aid gliding. Free grafts applied to paratenon are acceptable. It is only when this paratenon is absent that pedicle flap coverage is necessary. Without gliding, the tendon is functionless because it is unable to transmit muscle contraction to the movable part. On the dorsum of the hand, tendon gliding of 1.6 centimeters permits full flexion and extension of the digits. In contradistinction, the flexor tendons in the palm must glide 3.6 centimeters during the full range of digital motion. If exposed tendon is covered with a free graft (split or full thickness) the dermis of the graft will adhere not only to the tendon but also to surrounding muscle, periosteum and fascia producing adhesions which render the tendon functionless. If the exposed tendon is covered with a pedicle flap, the underlying fat of the flap forms minimal scar tissue and adhesion between the tendons and the flap. Minimizing adhesions is a necessary prerequisite to regaining or maintaining motor function. Furthermore if a tendon has been avulsed, subsequent replacement necessitates a bed free of dense scar tissue.

Exposed bone, which is or has been traversed by functional motor units in the forearm and hand, requires pedicle flap coverage in anticipation of the restoration of motor units across the area. Periosteum readily accepts a split graft, but if tendon grafting, repair or transfer is anticipated, the free

split or full thickness graft provides inadequate gliding surfaces as discussed above.

The exposed joint in the hand, wrist or elbow necessitates pedicle flap coverage to preserve joint integrity. When the joint capsule is missing, a free graft cannot be utilized as it would have no nourishment. Sufficient pedicle coverage in which the dorsum of the joint is excised requires application of the pedicle with the joint moderately flexed and conversely adequate coverage of the volar surface requires almost complete extension. This allows adequate soft tissue to permit a full range of motion.

Major neurovascular elements require pedicle coverage for the following reasons: 1) infection beneath split coverage may lead to erosion of a vessel wall; 2) danger of direct damage to vessel; and 3) prevention of painful neuromata. The dangers of vascular erosion have been well documented after radical neck dissection. In the upper extremity vessel coverage can usually be obtained by shifting adjacent muscle over the vessels yet flap coverage may be necessitated by circumstances of surrounding skin, bone, tendon or joint. Additionally, the thicker pedicle flap coverage cushions underlying neuromata.



FIGURE 2. Previously the distal forearm was covered with an abdominal pedicle flap. Reflection of the flap at a subsequent procedure reveals the underlying fatty layer forming minimal scar and thereby providing an ideal bed for nerve and tendon repair.

Fractures

Optimum healing of fractures requires approximation and immobilization of the disrupted bone ends. Accurate approximation at the fracture site can usually be gained by closed manipulation. In considering methods for immobilization one must realize that in moderate to severe injuries, appreciable edema formation occurs. Edema is a manifestation of tissue damage with resultant alteration in capillary permeability. The protein rich edema fluid attracts water into the interstitial spaces until capillary permeability is re-established. The collateral ligaments and soft tissues surrounding the joints and tendons become engulfed in this edema fluid which congeals about these structures. With the subsequent deposition of collagen, the collateral ligaments become non-yielding, the flexor and extensor tendons are bound to immovable surrounding structures and the hand is "frozen". Consequently the primary goals when treating an injury are: 1) approximation and immobilization of fracture, 2) maintaining of digital length, 3) preservation of joint motion, and 4) reduction of edema. Immobilization requires either external or internal splinting. External immobilization (plaster cast) usually requires immobilizing more joints than just the two in juxtaposition to the fracture. It is evident that if prolonged external splinting of a fracture is employed, the patient ends up with a stiff finger or hand. As a compromise, passive joint motion is inaugurated at 12-14 days post fracture with progressive increase in motion until full exercise is accomplished at three weeks. This is possible in transverse fractures which firmly abut. However, spiral or crushing fractures require longer periods of immobilization for the fracture site to become sticky enough to tolerate joint motion.

The dissatisfaction with external splinting has led to a greater interest in internal fixation with various screws, plates, wires, etc. The advantages of internal fixation include: 1) firm approximation of fracture ends; 2) immobilization across the fracture site; 3) minimal immobilization of juxtapositioned joints; 4) preservation of digital length; and 5) early joint



FIGURE 3. An avulsion injury exposing bone and joints. In addition, subsequent restoration of digital extension by tendon grafting necessitates pedicle coverage as discussed in text.

mobilization. The use of K-wires is illustrated. (Figures 4 and 5) The disadvantages of internal fixation include infection and impingement of wires on associated structures, i.e., tendons (the latter can be avoided by careful technique).

The criterion of success is ultimate function in the part and the means by which this can best be accomplished whether by external or internal splinting, is determined by the operator's previous experiences.

Disruptions of Tendons

Tendon repair or transfer is not undertaken as a primary procedure when loss of overlying skin necessitates pedicle flap coverage. Under these circumstances, tendon repair is delayed until after completion of the flap transfer to allow maturing of the resulting scar tissue. When bone and tendon have been disrupted at the same level, bony healing is obtained before re-establishment of tendon function.

When only tendons are divided, the decision of primary versus secondary repair must be considered. This decision is necessitated by the presence of fibro-osseous sheaths through which the tendons glide. On the dorsum of the hand, these sheaths are located over the wrist and are approximately 4 cm in length. Since the amplitude of motion of the extensor tendons for complete digital flexion and extension is so small—1.6 cm—primary repair is the general rule. When the extensors are cut in the fibro-osseous tunnels, the dorsum of these tunnels may be excised. If an entire sheath has been sacrificed, slight "bow stringing" occurs across the joint when the wrist and digits are fully extended.



FIGURE 4. Transverse fractures of the middle phalanges of the long and ring fingers are evident.



FIGURE 5. Crossing Kirschner wires immobilize the long finger middle phalanx. The fracture in the ring finger was so close to the joint that adequate purchase for criss-crossing wires could not be obtained. Fixation was obtained by traversing the distal interphalangeal joint.

The flexor tendons are enclosed in similar fibro-osseous tunnels extending from the distal palmar crease to the distal phalanx. Primary repair of flexor tendons divided in the forearm, wrist, palm of the hand or over the distal phalanx is indicated in clean wounds seen within six hours. Clean laceration of tendons within the area of the fibro-osseous tunnel extending from the distal palmar crease to proximal interphalangeal joint area has divided support for primary versus secondary repair. Primary repair of both tendons has been advocated by Kleinert.[3] Verdan and others have advocated primary repair of the profundus and removal of the flexor digitorium sublimis when both tendons are severed.[4] Boyes and Pulvertaft among others feel it is most advantageous to repair only severed nerves and overlying skin in anticipation of secondary flexor tendon grafts or tenorrhaphies several weeks after healing has been obtained.[5,6] The occasional operator in this area is strongly urged to adopt a policy of obtaining primary wound healing and subsequently seeking consultation. The first chance at repair is the best and if excessive scar formation results then subsequent procedures are markedly compromised.

Nerve Repair

Much of the disagreement concerning primary versus secondary nerve repair has arisen from attempting to apply wartime experiences to civilian type injuries. The World War II experiences, reported by Woodhall and Seddon,

are not applicable in toto to civilian injuries.[7,8] The following remarks are limited to management of civilian injuries. The factors favoring nerve repair at time of acute injury include: 1) absence of scar tissue necessitating further dissection; 2) no need for extensive nerve mobilization as cut ends have not retracted and contracted; 3) time and number of operative procedures saved if anastomosis is successful; 4) the early nerve repair yields better motor function recovery; 5) particularly good results are obtained in children with primary repairs; 6) division by a sharp instrument inflicts little concomitant tissue damage; and 7) digital nerve lacerations almost necessitate primary repair.

The factors favoring early repair after obtaining healing of injured tissues include: 1) division of nerve by blunt instrument which inflicts much concomitant tissue damage; 2) avulsion injury requiring primary attention to pedicle flap coverage; 3) grossly contaminated injury; and 4) forearm injury with division of median and ulnar nerves and flexor tendons. In the forearm, the muscles will contract and develop contractures if not repaired early. Thus, tendon division takes precedence over nerve repair in the forearm. However, in the palm and digits, the proximal end of the severed tendon is held forward by the vincula, the lumbricals or by interconnections between flexor tendons. Thus nerve repair takes precedence over tendon repair in these areas.

Critical evaluation of nerve regeneration was lacking until Moberg demonstrated the need for determining "tactile gnosis". A hand could detect touch and pain stimuli but be unable to interpret object form unless aided by direct vision. He suggests determining the functional value of cutaneous sensibility by the following tests: 1) tactile gnosis for precision sensory gap—ninhydrine finger printing method; 2) sensibility for gross grip—examine palm for evidence of callosities; 3) protective sensibility—history of accidental burns without pain.[9]

Despite the timing of repair, one must remember that if adequate nerve function return is not observed after a calculated time for recovery, then re-exploration must be undertaken to enhance the chances for functional recovery. The earlier a divided nerve is repaired the better motor and sensory recovery.

Maintaining Joint Motion

A most neglected area when managing an injured extremity is joint mobility. It is of little value to obtain excellent skin coverage, bony union and nerve regeneration if the joints are stiff. Tendon repairs or transfers on digits with stiff joints are futile. If a full range of passive motion is not obtained before tendon repair then a full range of motion cannot be expected after tendon repair. Constant awareness of joint mobility is essential. Understanding the factors contributing to joint stability and the alterations resulting from injury will aid in management.

The factors contributing to joint stability are: 1) collateral ligaments; 2) volar capsule (plate); 3) long extensor tendons; 4) long flexor tendons; and 5) intrinsic musculature. (Figure 6 a-h) The characteristics of the metacarpal phalangeal joint are used for discussion.

Collateral ligaments (Figure 6 a-b) arise above the axis of rotation of the metacarpal head and extend to the center of the proximal phalanx. The collateral ligaments are lax in full digital extension as the distance from origin to insertion is shorter than the ligament length. As flexion proceeds, the proximal phalanx glides around the oblong metacarpal head resulting in progressive tautness of the collateral ligaments. If the collateral ligaments are not supple to allow this rotation then flexion can be initiated but can proceed only to the point allowed by the shortened collateral ligaments.

The volar plate forms the thickened part of the capsule separating the flexor tendons from the joint space. (Figure 6 c-d) Obliteration of this space by scarring of the joint capsule can limit either extension or flexion according to the initial position of the joint surfaces. With the joint in full extension obliteration of the potential space eliminates gliding of the proximal phalanx around the metacarpal head. The dorsal surface of the proximal phalanx pulls away from the metacarpal phalangeal head, much as opening a page of a book, producing a depression over the dorsum of the joint. Obliteration of the volar capsule space with the finger in flexion limits extension of the proximal phalanx.

The intrinsic musculature has two basic functions, flexion of metacarpal phalangeal joints and extension of proximal and distal

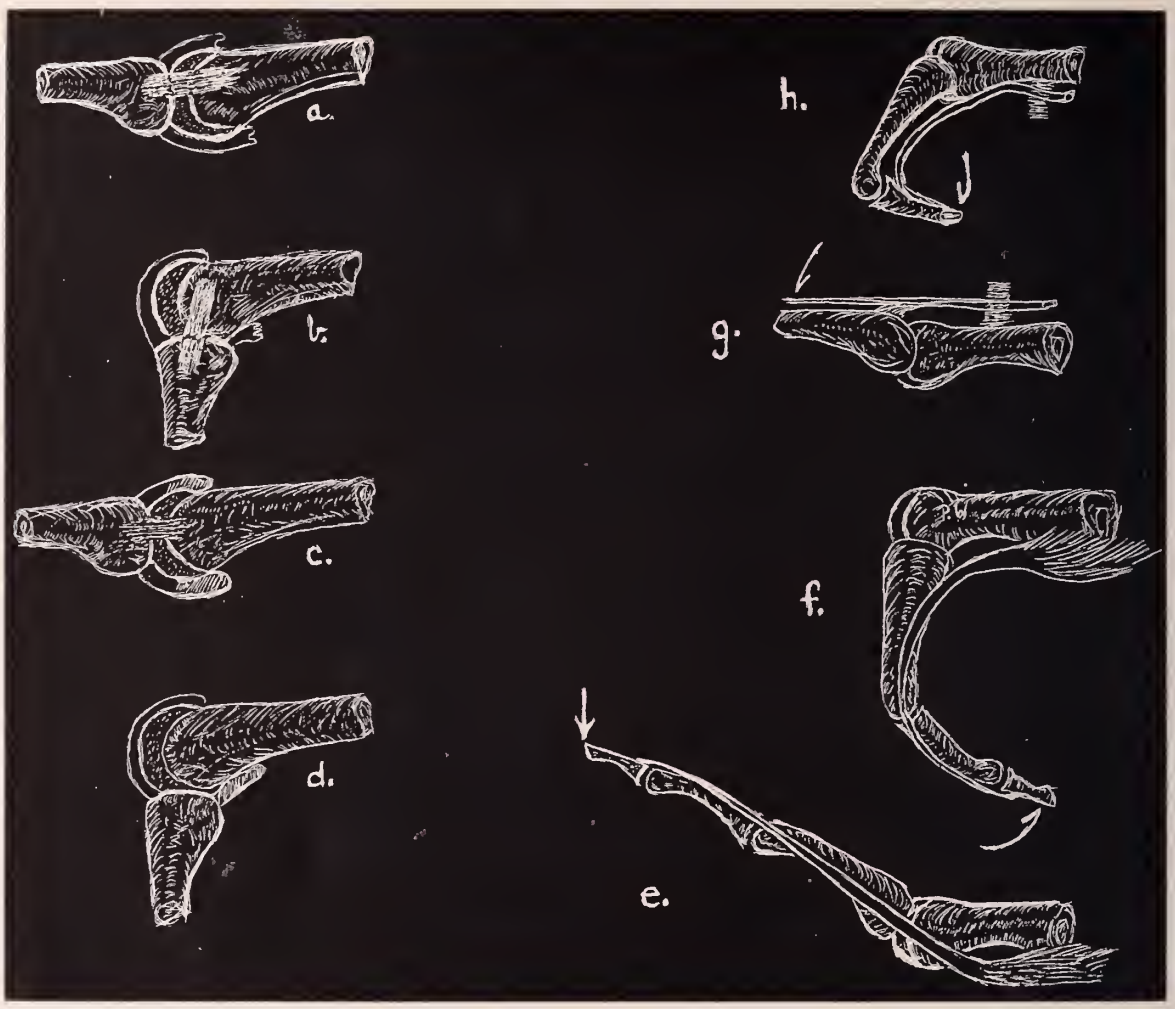


FIGURE 6. a. In digital extension, collateral ligaments are lax. b. In flexion the collateral ligaments span greater distance due to oblong metacarpal head. c. Scarring of volar plate prevents gliding of proximal phalanx around metacarpal head. d. Scarring of volar plate with joint in flexion prevents joint extension, e. Contracted intrinsic muscle prevents flexion of distal phalanx with metacarpal phalangeal joint extended. f. Flexion of metacarpal phalangeal joint relaxes contracted intrinsics. g. Scar about extensor tendon limits joint flexion. h. Scar about flexor tendon limits digital extension.

interphalangeal joints. Contracture (shortening) of these muscles limits metacarpal phalangeal joint extension and interphalangeal joint flexion. Intrinsic contracture can be detected by hyperextending the metacarpal phalangeal joint (placing the intrinsics on a stretch) and attempting flexion of the distal phalanx (Figure 6 e-f) Then the metacarpal phalangeal joint is flexed and flexion of the distal phalanx again attempted. If the distal phalanx is held in rigid extension when the metacarpal phalangeal joint is hyperextended then the intrinsic musculature is contracted. Flexion of the metacarpal phalangeal should release this tightness. If not, then tightness of distal phalanx is due to scarring over the dorsum of the digit.

The long flexor and extensor tendons may limit range of joint motion when they are bound in scar. Scarring about the extensor tendons can limit flexion whereas scarring about the flexor tendons can limit digital extension. (Figure 6 g-h) Movement of a joint interposed between the area of scar and the digit will reveal the effect of scarred tendons on range of motion. With scar about the flexor tendons in forearm, digital extension may be limited with the wrist in neutral. If the wrist is flexed then passive extension of the digital joint can be obtained. This indicates that limitation of joint motion resulted from scarring about the flexor tendons. The converse is true for scarring about extensor tendons.

With this background it is evident that many anatomical factors can contribute to joint stiffness when coupled with alterations associ-

ated with the injury—the most malignant factor being edema. Edema must be minimized in the injured extremity! This is accomplished by constant elevation of the extremity which has been encased in a pressure dressing. Elevation is not simply raising the forearm for brief periods or putting it in a sling. Edema is minimized by elevation of the hand with supporting strips to extend as high as possible with the elbow extended. Elevation is maintained until edema has completely subsided and re-initiated if edema recurs. The pressure dressing is of particular importance. It provides immobilization of and exerts uniform pressure on the digits, wrist and forearm. The nail beds should always remain exposed for use as an indicator of digital circulation. Re-inforcement or replacement of the dressing assures maintaining its firmness.

The prevention of joint stiffness cannot be stressed too vigorously.

Summary

Evaluation of the acutely injured upper extremity is assisted by a systematic approach according to tissues involved, i.e., skin, bone, joint, nerve and tendon. Indications for and methods of skin replacement, bony fixation, nerve and tendon repair have been presented. The importance of maintaining supple joints has been stressed.

Bibliography

1. Malt, R. A., and McKhann, C. F., Replantation of Severed Arms. *J.A.M.A.* 189:716, 1964.

2. Shaw, R. S., Treatment of Extremity Suffering Near or Total Severance with Special Consideration to the Vascular Problem. *Clin. Orthop.* 29:56, 1963.

3. Kleinert, H. E., Kutz, J. E., and Woolf, L. A., *Primary Repair of Lacerated Flexor Tendons in "No Man's Land."* Presented at American Society for Surgery of the Hand. San Francisco, 1967.

4. Verdan, C., Primary Repair of Flexor Tendons—A Summary. *Surgical Clinics of North America* 40:426, 1960.

5. Boyes, J. H., Flexor Tendon Grafts in the Fingers and Thumb. An Evaluation of End Results. *J. Bone & Jt. Surg.* 32A:489, 1950.

6. Pulvertaft, R. G., Tendon Grafts for Flexor Tendon Injuries in the Fingers and Thumb. *J. Bone & Jt. Surg.* 38B:175, 1956.

7. Woodhall, B. and Beebe, G. W. (Eds.): Peripheral Nerve Regeneration. *Veterans Administration Medical Monograph,* U. S. Government Printing Office, Washington, D.C., 1956.

8. Seddon, H. J. (Ed.): *Peripheral Nerve Injuries.* London, Her Majesty's Stationery Office, 1954.

9. Moberg, E., Objective Methods for Determining Functional Value of Sensibility in Hand. *J. Bone & Jt. Surg.* 40B:3, 1958.

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The bylaws of the Kentucky Medical Association provide that all scientific discussions and papers read before the KMA Annual Meeting shall be referred to the KMA Journal for consideration for publication. The bylaws further state that the editor or the associate editor may accept or reject these papers as it appears advisable and return them to the author if not considered suitable for publication.

Please mail your scientific articles to The Journal of the Kentucky Medical Association, 3532 Janet Ave., Louisville, Kentucky 40205.

SPECIAL ARTICLES

OEO Programs in Kentucky
A Progress Report

THE KMA Committee on Appalachian and OEO Programs met with the directors of several of the new government programs during the past year. In these meetings the Committee found that these programs contain a variety of approaches to medical care. For example, the Appalachian Program is attempting to develop an all inclusive regional approach to medical care, whereas the OEO programs are organized on a local basis and serving their own areas in different ways.

In order to promote a better understanding of how these programs operate, the Committee requested that *The Journal* publish the following three reports, written by OEO program directors, for the information of the membership. A report on Appalachian programs in Kentucky will be printed in a future issue.

FRANK M. GAINES, JR., M.D., CHAIRMAN
KMA COMMITTEE ON APPALACHIAN
AND OEO PROGRAMS

Neighborhood Health Center, Louisville

HARVEY SLOANE, M.D.

ILL HEALTH and poverty reinforce each other. Traditionally the delivery of health services to the poor has been fragmented, impersonal and inaccessible. The Office of Economic Opportunity is promoting a national demonstration to establish Neighborhood Health Centers to provide delivery of comprehensive, continuous and personalized health services to the poor. In June, 1967, the Park-DuValle area of Louisville received a grant of one and one-half million dollars from OEO and three private local foundations to establish a Neighborhood Health Center which will develop a new delivery of health care to the over 12,000 poverty affected population which is 85 percent Negro.

The Health Center will include outpatient medical and dental services (preventive, diagnostic, therapeutic, and rehabilitative), mental health services and social services. Great emphasis will be placed on health education, disease prevention and outreach services into the community.

The activities of the Health Center are based on the family physician (internist, pediatrician or general practitioner) who either renders service to the whole family or serves as a member of the health team for that family. The health team comprises the family physician(s), nurses, and social worker. Other services such as dentistry, mental health, nutrition and health education will be included when necessary. The health team will work in an integral fashion and primary interest will be placed on promoting the patient's motivation and concern toward his health. There is follow up work being conducted in the homes and schools by professional and subprofessional members of the staff. Since social and health problems are often closely interrelated, great emphasis is being placed on social service workers working closely with the health professionals.

The Mental Health Department is directed toward crisis intervention and group therapy of a supportive nature, and a program of community mental health is being developed which will relate to the schools and courts. Alcoholism and narcotics programs are anticipated in the next year.

Each department of the Center is training and utilizing subprofessionals in keeping with the idea that many of the duties professionals now perform can be done by a less trained person. Furthermore, the Health Center wishes to develop health careers for the residents of the area. Presently, the Health Center is only serving indigent patients 21 and under, since temporary quarters are not of adequate space volume. In late summer the renovated public housing units will be completed and service open for the whole population. The Health Center is part of the Pilot Cities Program which will not only provide health services, but also employment, day care, child development, and other services in a neighborhood center complex. In this way total community service to the Park-DuValle area will be developed.

Policy of the Neighborhood Center is conducted by a Board of Directors composed of professionals, community leaders of Louisville and residents from

the area served, each representing one-third of the Board. The professionals include representatives from the School of Medicine, the Jefferson County Medical Society, Falls City Medical Society, the Jefferson County Dental Society, Kent School of Social Work and the Health and Welfare Council.

Floyd County Comprehensive Health Services Program

Russell Hall, M.D.

THE Big Sandy Area Community Action Agency was funded for a Comprehensive Health Services Program by the Office of Economic Opportunity. The Floyd County Health Department is the delegate agent responsible for the implementation of this program. The program began July 1, 1967 and was granted $469,175 in federal funds for the first year of operation. The program was approved on a five-year plan with a projected budget to total over $6 million in federal funds.

Before submission to OEO, the program was approved by the Floyd County Board of Health and the Floyd County Medical Society. It operates under the direction of Floyd County Health Officer R. L. Hall, M.D. In addition, the program also employs a medical consultant, Joanna Maiden, M.D.

A central staff including secretaries, social worker, health educator, nutritionist, etc. is housed in the health department. In addition to this staff, there are two patient coordinating teams which man outpost centers. Each team consists of a nurse and four community aides. Eventually, there will be eight teams serving the county.

The teams will not be delivering the actual medical service but will act as a link between the people and the service. It is anticipated the most far-reaching improvements will come from the health education provided by the teams. Already the community aides report that many homes and families are cleaner on follow-up visits than they were on initial encounters.

The patient is free to select his own physician before an appointment or referral is made for him. We feel this is one facet of our program making it a good link for the people. As in the case of the selection of his physician, the patient also selects his own pharmacy and dentist.

Some of the services provided or paid for by the program include drugs, dental service, rehabilitative devices, transportation, medical examinations, lab work, x-rays, etc. The program serves the indigent of Floyd County and can pay only if the patient is not covered by an existing agency such as Vocational Rehabilitation or Medicare. If the patient is not covered by an existing program or agency, we make every effort to enroll him in an on-going regular program.

The outposts opened in January. Thus far 352 families have been interviewed. This represents 756 home visits—as follow-up visits are necessary when serving the program recipients. Patients have been transported in the county 2,000 miles and out of the county (mainly U.K. Medical Center) over 6,000 miles. Through February, the program has expended $173,000. So far we have paid for medical treatment for about 50 patients at a cost of $8,100.

Middle Kentucky River Area Development Council

Mrs. Mary Jane Dunn, R.N.

TREMENDOUS strides have been made in the field of medicine and yet there are children in our classrooms today suffering from as many as four types of intestinal parasites. Through the efforts of Headstart and other federal and state funded programs in the school, children are receiving well balanced meals and learning the basic fundamentals of good hygiene. However, regardless of the knowledge the child receives in the classroom, he returns home to the same conditions. In February, 1966, the Office of Economic Opportunity funded for the Middle Kentucky River Area Development Council a Breathitt County Adult Health Education program to educate the household heads in the area in basic living conditions and to make them aware of various health hazards existing within their homes and surroundings. The program provides them with stimulation to create a more healthful community, and with information concerning available health services, and local doctors to facilitate better treatment. Through these combined efforts, it attempts to make the area a healthier and better place to live.

In June, 1967, the Breathitt County Adult Health Program was expanded to include the other three counties, Lee, Owsley and Wolfe, of the Middle Kentucky River Area Development Council, and combined with the health program to include community organization for neighborhood self-help projects.

Fieldworkers were chosen from the target group and trained by the director, a registered nurse, and other people of the community including local doctors, health department personnel and agency people. Each fieldworker was assigned an area of the county

including his own community. During the home visits the fieldworkers discussed all health needs of the family. When discussion alone did not meet the needs, the fieldworkers taught by demonstration. They also passed on to the family pertinent information relating to available agency resources. The outstanding needs identified by this program were (1) ignorance of the basic facts for a standard of healthy living, (2) inadequate or no means of garbage disposal, (3) inadequate or no toilet facilities, (4) inadequate housing, (5) inadequate water supply, (6) malnutrition and intestinal parasites and (7) no provisions for invalids and elderly people living alone in the area.

A family history sheet and a complete survey have been done on each family visited. Based upon the identification for needs, a proposal has been submitted for day care centers for mentally retarded children, a committee has planned a nursing home for the area, a proposal has been submitted for a program for the elderly, and facts have been made available to various agencies to enable them to conduct a more effective program to meet the needs of the low income group.

Since the beginning of the program, 2,734 families have been visited for a total of 12,652 visits. Four hundred twenty-one toilets have been made sanitary —some moved from over streams, placed over pits, made fly proof and in many instances newly built. Ten major dump sites have been located, nine garbage runs established, several clean-up campaigns have been conducted, 112 mothers are practicing birth control, 273 families have been immunized, 114 families have had dental work—many of them for the first time—and 2,232 referrals have been made to various sources.

The list is long and the results will continue to manifest themselves in future generations. Every attempt has been made to dispel the fears of mountain people in seeking medical assistance. Hours have been saved for our local doctors and health departments by explaining the correct use of the medical card and the results and regulations governing clinics. This program has reached the most isolated communities where people do not receive the local newspaper and therefore had often missed X-ray clinics and other services. We have not duplicated, but have tried only to supplement our existing resources. By providing stimulation and guidance we have attempted to break the habits and educate the people to the realization of the value of preventive medicine.

So much has been done through this program that cannot be reduced to statistics. Perhaps a statement made by Anfred Alexander, assistant director, State Technical Assistance, best sums it up, "The outreach of this program not only corrects the families' health problems but acts as a catalyst or springboard to get to the families' total needs."

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(See pages 727-750 for details)



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Precautions — The pretreatment physical examination should specifically include the breasts, pelvic organs and a Papanicolaou smear. Endocrine and possibly liver function tests may be affected by Ovulen. Such tests should be repeated two months after stopping the medication if their results were abnormal in a woman taking Ovulen. Pre-existing fibroids may enlarge under the influence of progestin-estrogen preparations. Patients with epilepsy, migraine, asthma, cardiac or renal dysfunction, which conditions might be influenced, require careful observation because Ovulen may cause some degree of fluid retention.

Ovulen should be used with caution in patients with a history of cerebrovascular accident. Nonfunctional causes should be considered if breakthrough bleeding occurs. Adequate diagnostic measures are indicated in women with undiagnosed vaginal bleeding. Carefully observe patients with a history of psychic depression and discontinue the medication if depression recurs to a serious degree. Any possible influence of prolonged Ovulen use on pituitary, ovarian, adrenal, hepatic or uterine function awaits further study. Carefully observe diabetic patients during Ovulen use since a decrease in glucose tolerance has occurred in a few such patients. Physicians should be alert to the earliest manifestations of thrombophlebitis and pulmonary embolism since such conditions occasionally occur in patients taking oral contraceptives. Use Ovulen judiciously in young patients in whom bone growth is not complete because of the effects of estrogens on epiphyseal closure. Age is no absolute limiting factor, although Ovulen use may mask the onset of the climacteric. Pathologists should be informed of Ovulen use when relevant specimens are submitted.

Side effects — The following adverse reactions have been observed in varying incidence in patients taking oral contraceptives: nausea, vomiting, gastrointestinal symptoms (such as abdominal cramps and bloating), breakthrough bleeding, spotting, change in menstrual flow, amenorrhea, edema, chloasma or melasma, breast changes (tenderness, enlargement, secretion), change in weight (increase or decrease), changes in cervical erosions and secretions, suppression of lactation when used immediately post partum, cholestatic jaundice, migraine, allergic rash, rise in blood pressure in susceptible individuals and mental depression.

Although the following side effects have been reported in users of oral contraceptives no cause and effect relationship has been established: anovulation post treatment, premenstrual-like syndrome, changes in libido, changes in appetite, cystitis-like syndrome, headache, nervousness, dizziness, fatigue, backache, hirsutism, loss of scalp hair, erythema multiforme and nodosum, hemorrhagic eruption and itching. Thrombophlebitis, pulmonary embolism and neuro-ocular lesions have occurred in users of oral contraceptives, although a cause and effect relationship has been neither established nor disproved.

The following laboratory results may be altered by oral contraceptives: Bromsulphalein® and other hepatic function tests—increased; coagulation tests, including prothrombin, Factors VII, VIII, IX and X — increased; thyroid function — increase in protein-bound iodine and butanol extractable protein-bound iodine, and a decrease in T^3 values; metyrapone test and pregnanediol determinations.

Dosage and administration — One tablet of Ovulen-21 daily for 21 consecutive days, beginning five days after the onset of a menstrual flow (the first day of menstruation is counted as day 1), then discontinued for one week. If Ovulen is started later than day 5 after menses begins another method of protection is used until the first seven tablets have been taken. Subsequent 21-day courses are begun on the eighth day after the last tablet was taken in the preceding cycle. This three weeks on — one week off schedule is continued whether or not withdrawal flow has begun, flow has ceased or spotting or breakthrough bleeding has been experienced.

If one tablet is missed it is to be taken as soon as it is remembered and the next tablet at the usual time. If two consecutive tablets are missed the dosage is doubled for the next two days, then the regular schedule is resumed. If three consecutive tablets are missed a new tablet cycle is started on the eighth day after the last tablet was taken. For the best protection in the latter two instances instruct the patient to use another method of contraception until the next seven consecutive tablets have been taken. The possibility of ovulation increases with each successive tablet missed.

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Before prescribing or administering, see Sandoz literature for full product information, including adverse reactions reported with phenothiazines. T following is a brief precautionary statement.

Contraindications: Severe central nervous system depression, comatose states from any cause, hypertensive or hypotensive heart disease of extreme degree.

Warnings: Administer cautiously to patients who have previously exhibited a hypersensitivity react (e.g., blood dyscrasias, jaundice) to phenothiazine Phenothiazines are capable of potentiating central nervous system depressants (e.g., anesthetics, opiates, alcohol, etc.) as well as atropine and phosphorus insecticides. During pregnancy, administer only when necessary.

Precautions: There have been infrequent reports leukopenia and/or agranulocytosis and convulsiv seizures. In epileptic patients, anticonvulsant medication should also be maintained. Pigmentar retinopathy may be avoided by remaining within recommended limits of dosage. Administer cautiously to patients participating in activities requiring complete mental alertness (e.g., driving) Orthostatic hypotension is more common in fema than in males. Do not use epinephrine in treating drug-induced hypotension. Daily doses in excess 300 mg. should be used only in severe neuropsychiatric conditions.

Adverse Reactions: *Central Nervous System*—Drowsiness, especially with large doses, early in treatment; infrequently, pseudoparkinsonism and other extrapyramidal symptoms; nocturnal confusion, hyperactivity, lethargy, psychotic reactions, restlessness, and headache. *Autonomic Nervous System*—Dryness of mouth, blurred visio constipation, nausea, vomiting, diarrhea, nasal stuffiness, and pallor. *Endocrine System*—Galactorrhea, breast engorgement, amenorrhea, inhibition of ejaculation, and peripheral edema. *Skin*—Dermatitis and skin eruptions of the urticar type, photosensitivity. *Cardiovascular System*—Changes in the terminal portion of the electrocardiogram have been observed in some patients receiving the phenothiazine tranquilizers including Mellaril (thioridazine hydrochloride). While there is no evidence at present that these changes are in any way precursors of any significa disturbance of cardiac rhythm, several sudden an unexpected deaths apparently due to cardiac arres have occurred in patients previously showing electrocardiographic changes. The use of periodic electrocardiograms has been proposed but would appear to be of questionable value as a predictive device. *Other*—A single case described as parotid swelling.

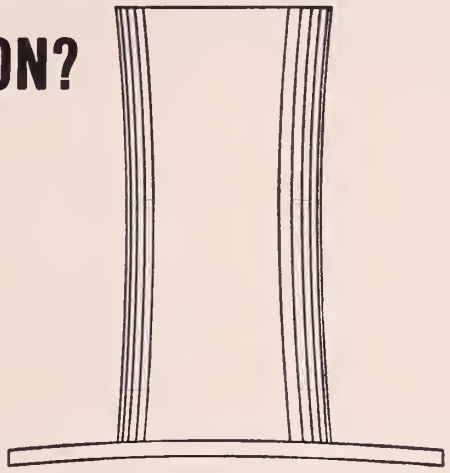
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Where Are We Headed?

NO physician needs to be reminded that this is a changing world in the socio-economic area as well as in medical information and technology. It is no easy matter for the older physician to keep up his self-education; however, if he fails to do so, he may hear his younger colleagues using a medical language which he doesn't understand. This is true in both the purely professional area and in the socio-economic area.

Even though most of us were not directly involved in the recent Annual Meeting of the AMA, we are very much interested in what went on there. Many times this meeting is the chosen forum for the presentation of new and important medical discoveries. In addition, the contents of the meeting inform us as to how the American Medical Association is relating to the changing American society as a whole. From the actions of the House of Delegates and the speeches of the elected officers of the AMA we gain an insight into the present state of this relationship.

In the area of health care financing the House of Delegates proposed the principle of graduated income tax credits for premium paid for adequate health insurance. If adopted by Congress, this surely would encourage the growth of the private health insurance coverage. It remains to be seen if the idea receives any support in the Congress. The principle of voluntary health insurance coverage for out-patient X-ray and laboratory services was endorsed. This would apply to patients scheduled for hospital admission and the X-ray and laboratory services would have to be acceptable to the hospital and its medical staff. There was a resolution by the delegates disapproving of the provision of funds on the part of the federal government for subsidizing any one organizational form of medical practice and resolving to continue to espouse the private, fee-for-service practice of medicine.

In view of the fact that much of the practice of medicine is now hospital centered, the House of Delegates again urged that adequate representation of the medical staff on the voting membership of the hospital's governing body is the most effective mechanism for assuring a working communication between the governing board and the medical staff; the physicians serving on the governing board would be nominated by the medical staff of the hospital.

A resolution having to do with medical costs called upon the AMA, in cooperation with the federal government, to investigate the true reasons for rising hospital costs and to collect data on utilization and hospital stays and the per diem cost in veterans hospitals and other federally controlled hospitals.

A resolution which is of particular importance to local medical societies called upon all state and local medical societies to act swiftly and firmly in all instances of known exploitation and excessive charges for health care that may occur in their jurisdiction.

The inaugural address of Dwight L. Wilbur, M.D., was an excellent one and the reading of it gives one the feeling that the AMA will have good leadership during his term in office. One of the important points that he made and one which all physicians need to think upon is that the ultimate force that will determine the nation's social, economic and political course will be public opinion. To quote from Doctor Wilbur, "The key question then becomes, who and what will shape public opinion."

In spite of being busy taking care of sick people, physicians have to be willing to become involved in the health planning that goes on in their communities. Physicians will have to become experts in the economics of health care in general as well as experts at the bedside if they are to influence public opinion, the ultimate force.

WALTER S. COE, M.D.

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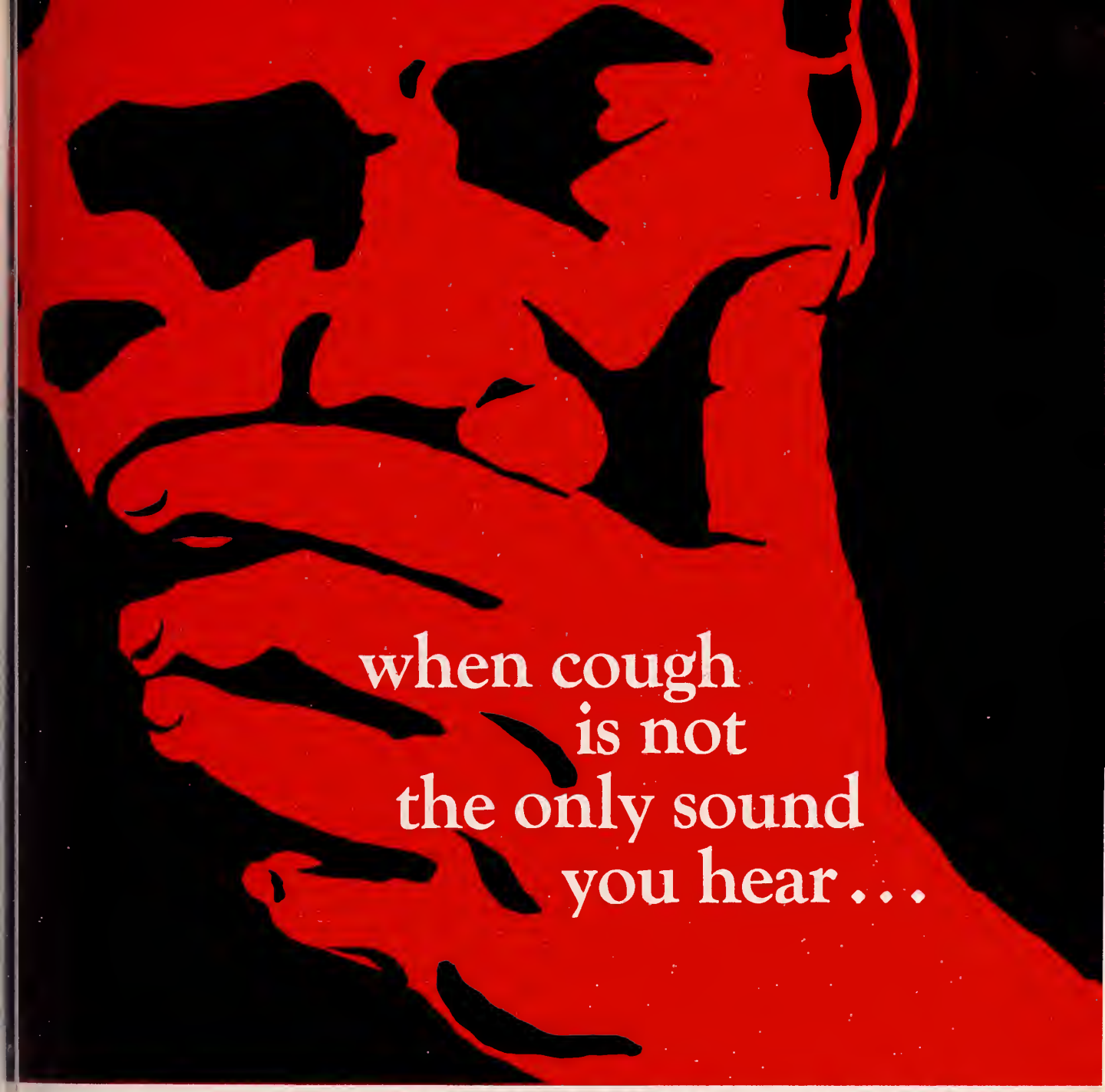
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Side Effects: Minimal, but when encountered may include jitteriness, nausea, drying of mouth, insomnia, constipation, which disappear upon adjustment of the dose or discontinuance of treatment.

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As if in anticipation of this historic and perilous era Justice Oliver Wendell Holmes seems, by the above statement, to make a posthumous appeal to those who care about the world in which they live, for their involvement in the affairs of their country.

Resolution of the longest of our wars, our financial crisis, increasing lawlessness, and the threat of big government can be obtained only through politics. It can be done through no other avenue.

Six of the signers of the Declaration of Independence were physicians (this, too, was politics). Medicine must carry on this tradition for, literally and figuratively, it is closest to the nation's heartbeat.

The analytical mind of the physician uniquely qualifies him to place his observations into focus. If he does not use these qualifications to share in the responsibility for his nation's dilemmas he will have forfeited his right to object to whatever fate may be dealt him by those who demonstrate more interest but may be less dedicated and less qualified.

If you care about these things we urge you, as individual leaders, to become an active part of one of the nation's greatest political action groups by joining KEMPAC and AMPAC which are dedicated to selecting and electing such candidates as will try to bring government back to the people.

Elections for seats in Congress will be held next November.

DO YOU CARE?

John C. Quertermous, M. D.
Chairman
KEMPAC

My Political Creed

I am a free citizen in a free nation.

Whoever diminishes my freedom as an individual diminishes the sum total of freedom in my country.

I am also a physician, free thus far to treat my patients to the best of my ability.

Abridge that freedom and the health of my patients is adversely affected.

These things being true, I cannot -- I will not -- stand idly by when these hard-won freedoms are under attack.

For I believe that the values upon which this country was founded are immutable and have not been eroded by the passage of years.

I believe that I, as a free citizen in a free land, am obligated to defend my beliefs in the ways permitted to me, and required of me, by our form of government.

Therefore, let no man seek to bar me from the political process; for it would be akin to denying my right to participate in the process that determines free government.

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KMA OFFICERS 1967 — 1968



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PRESIDENT-ELECT
Henry B. Asman, M.D.
Louisville

Doctor Asman will be installed as president of the Kentucky Medical Association Wednesday evening, September 25, during the 1968 Annual Meeting in Louisville. He served as vice president of the Association in 1961 and as its secretary from 1963 until he was named president-elect in 1967.

A native of Louisville, Doctor Asman graduated from St. Xavier High School in 1927, received his B. S. degree from the University of Notre Dame in 1932 and his M.D. degree from the University of Louisville School of Medicine in 1936. He completed his internship at the Louisville General Hospital and his residency training in general surgery at St. Joseph's Infirmary, then entered the practice of colo-proctology in 1939 with his father.

During World War II, Doctor Asman entered military service as a captain and was stationed in the European Theatre and with the 100th Evacuation Hospital in 1945. He was separated in 1946 as a lieutenant colonel.

Doctor Asman is a fellow of the American College of Surgeons and of the Southeastern Surgical Congress, an associate fellow of the American Proctologic Society and past president of the Ohio Valley Proctologic Society. He is a member of the Kentucky and Louisville Surgical Societies, past president of the Catholic Physicians Guild and a member of the Board of Directors of the Kentucky Division, American Cancer Society.

A past president of the St. Joseph Infirmary staff, Doctor Asman is also a staff member at Kentucky Baptist, Norton Memorial Infirmary, Methodist Evangelical, SS. Mary & Elizabeth, St. Anthony and Children's Hospitals. As a teacher he has contributed to the field of medicine as a clinical instructor of surgery (proctology) at the University of Louisville School of Medicine from 1939 to 1959 and as chief of proctology in the St. Joseph Infirmary's department of surgery.

Recognized as an outstanding member of his profession for his many contributions to the field of health care and for his active participation in local civic affairs, Doctor Asman is an excellent choice as president-elect of the Kentucky Medical Association.

VICE PRESIDENT, CENTRAL
Glenn W. Bryant, M.D., Louisville

A 1938 graduate of the University of Louisville School of Medicine, Doctor Bryant completed his internship in surgery at Grady Memorial Hospital in Atlanta, Ga., and his residency in obstetrics and gynecology at Louisville General Hospital where he was chief resident in 1942-43. He is on the staff of Kentucky Baptist, St. Joseph and Methodist Evangelical Hospitals and a consultant in obstetrics and gynecology at Ireland Army Hospital at Ft. Knox. He is a fellow of the American College of Surgeons and a member of the American College of Obstetricians and Gynecologists and the Central Association of Obstetricians and Gynecologists.

VICE PRESIDENT, EASTERN
J. Sankey Williams, M.D., Nicholasville

Doctor Williams has been in general practice in Nicholasville since 1946 when he was discharged from the Medical Corps of the U.S. Army Air Force with the rank of major. He graduated from the University of Louisville School of Medicine in 1942 and completed his internship in Louisville hospitals. Doctor Williams is a member of the Board of Directors of the Kentucky Academy of General Practice and has served as its president and secretary. He is a member of the Jessamine County Board of Health and has been secretary of the Jessamine County Medical Society for 17 years. He was named "Doctor of the Year" by the KAGP in 1963.

VICE PRESIDENT, WESTERN
Luther M. Wilson, Jr., M.D., Bowling Green

A general practitioner, Doctor Wilson graduated from the University of Louisville School of Medicine in 1946 and completed his internship at Springfield, Ohio City Hospital in 1947. He served in an Army Specialized Traning Program at the University of Louisville from 1944 to 1945 and as a medical officer from 1950 to 1953. Doctor Wilson is a past president of the Warren-Butler-Edmonson County Medical Society and was a Warren County delegate to the KMA House from 1960 to 1967. He is past president and member of the Executive Committee of the medical and dental staff of the Bowling Green-Warren County Hospital and chairman of the obstetrical department.

KMA Secretary and Treasurer

SECRETARY

S. Randolph Scheen, M.D., Louisville



Doctor Scheen, a 1953 graduate of the University of Louisville School of Medicine, received his master of science degree in dermatology from the University of Minnesota in 1960. He is chief of dermatology at St. Joseph's Infirmary, consultant and attending dermatologist at the Veterans Administration Hospital and a consultant at Central State Hospital. Doctor Scheen is an instructor in medicine at the University of Louisville School of Medicine and a member of the American Academy of Dermatology, the Noah Worcester Dermatologic Society and the Alumni Association of the Mayo Foundation where he was a fellow in dermatology from 1957 to 1959.

TREASURER

Keith P. Smith, M. D., Corbin



In addition to serving KMA as its treasurer since 1963, Doctor Smith has also been a vice president, and chairman of the Board of Trustees. He is past president and vice president of the Kentucky Academy of General Practice and a 1936 graduate of the University of Louisville School of Medicine. Following his internship at St. Elizabeth Hospital, Covington, Doctor Smith helped his father to operate the Smith Hospital in Corbin. When the Corbin Municipal Hospital was opened, he was named first chief of staff. Doctor Smith served in the U.S. Air Force during World War II and was discharged in 1945 with the rank of major.

KMA Journal Editors

EDITOR

Walter S. Coe, M.D., Louisville



Now serving his second year as editor of *The Journal*, Doctor Coe was an associate editor from 1962-66 and previously the book review editor. He is an associate clinical professor of medicine at the University of Louisville School of Medicine from which he received his M.D. degree in 1943. He is a past president of the Kentucky, Louisville and Jefferson County Heart Associations and the Kentucky Society of Internal Medicine.

ASSOCIATE EDITOR

Sam A. Overstreet, M.D., Louisville



A former *Journal* editor for eight years, Doctor Overstreet was president of KMA during its Centennial in 1950-51 and is a former speaker of the House of Delegates. A 1923 graduate of the University of Louisville School of Medicine, Doctor Overstreet is a member of the Advisory Committee to Blue Cross and the Advisory Committee to Selective Service. He is a member of the Southern Medical Association and of the American College of Physicians.

ASSISTANT EDITOR

Walter I. Hume, Jr., M.D., Louisville



An active participant in KMA committee work, Doctor Hume is chairman of the Committee on Medical Education and a member of the Coordinating Commission on Governmental Medical Services and the Study Committee for Improved Community Health. A 1949 graduate of Harvard Medical School, Doctor Hume is an assistant clinical professor of surgery at the University of Louisville School of Medicine. He was recently named president-elect of the Jefferson County Medical Society.

AMA Delegate

J. Thomas Giannini, M.D., Louisville



Since 1963 Doctor Giannini has been a KMA delegate to the AMA and previously served as an alternate delegate. He has been a member of the KMA House of Delegates from the Jefferson County Medical Society and chairman of the Scientific Exhibits Committee. A 1938 graduate of the University of Louisville School of Medicine, Doctor Giannini is a fellow of the American Society of Plastic and Reconstructive Surgeons. He served in the U.S. Navy Medical Corps from 1942-54.

AMA Delegates

John C. Quertermous, M.D., Murray



Doctor Quertermous, chairman of the KEMPAC Board of Directors, has been a KMA delegate to the AMA since 1963 and an alternate delegate before that time. A 1942 graduate of the University of Louisville School of Medicine, Doctor Quertermous, has practiced internal medicine in Murray since 1950. He is a past president of the Calloway County Medical Society and a former chairman for national affairs of the KMA Council on Legislative Activities.

Charles C. Rutledge, M.D., Hazard



Elected a delegate to the AMA in 1965, Doctor Rutledge is a former alternate delegate, KMA Councilor and member of the Scientific Assembly Committee. He graduated from the University of Louisville School of Medicine in 1946 and has practiced general surgery in Hazard since 1955. Doctor Rutledge is a fellow of the American College of Surgeons and a member of the Kentucky Surgical Society and the Southern Medical Association.

New Trustees

William W. Hall, M.D., Owensboro

A 1954 graduate of the University of Louisville School of Medicine, Doctor Hall is chief of staff at the Owensboro-Daviess County Hospital and a member of the Owensboro-Daviess County Board of Health. He has been in general practice in Owensboro since 1959. Doctor Hall is a former alternate delegate to the AMA, has served as insurance editor of *The Journal* since 1965 and represented the second district on the KEMPAC Board of Directors in 1963-64.

J. Campbell Cantrill, M.D., Georgetown

Doctor Cantrill was vice president of KMA in 1966-67 for the Eastern District and has served as Sixth District Keyman and chairman for state affairs of the Council on Legislative Activities. He is a past president, secretary-treasurer and delegate to KMA of the Scott County Medical Society and a member of the Scott County Board of Health. Doctor Cantrill graduated from the University of Virginia College of Medicine in 1950 and has been in general practice at Georgetown since 1954.

Andrew M. Moore, M.D., Lexington

A past president of the Fayette County Medical Society and the Ohio Valley Plastic Surgery Society, Doctor Moore is a member of the American Association of Plastic Surgeons, the American College of Surgeons and the Kentucky Surgical Society. He graduated from the Washington University School of Medicine in 1943. Doctor Moore is an associate professor of plastic surgery at the University of Kentucky Medical Center Hospital and a member of the KMA Committee on Medical Education.

Election of Trustees and Alternate Trustees

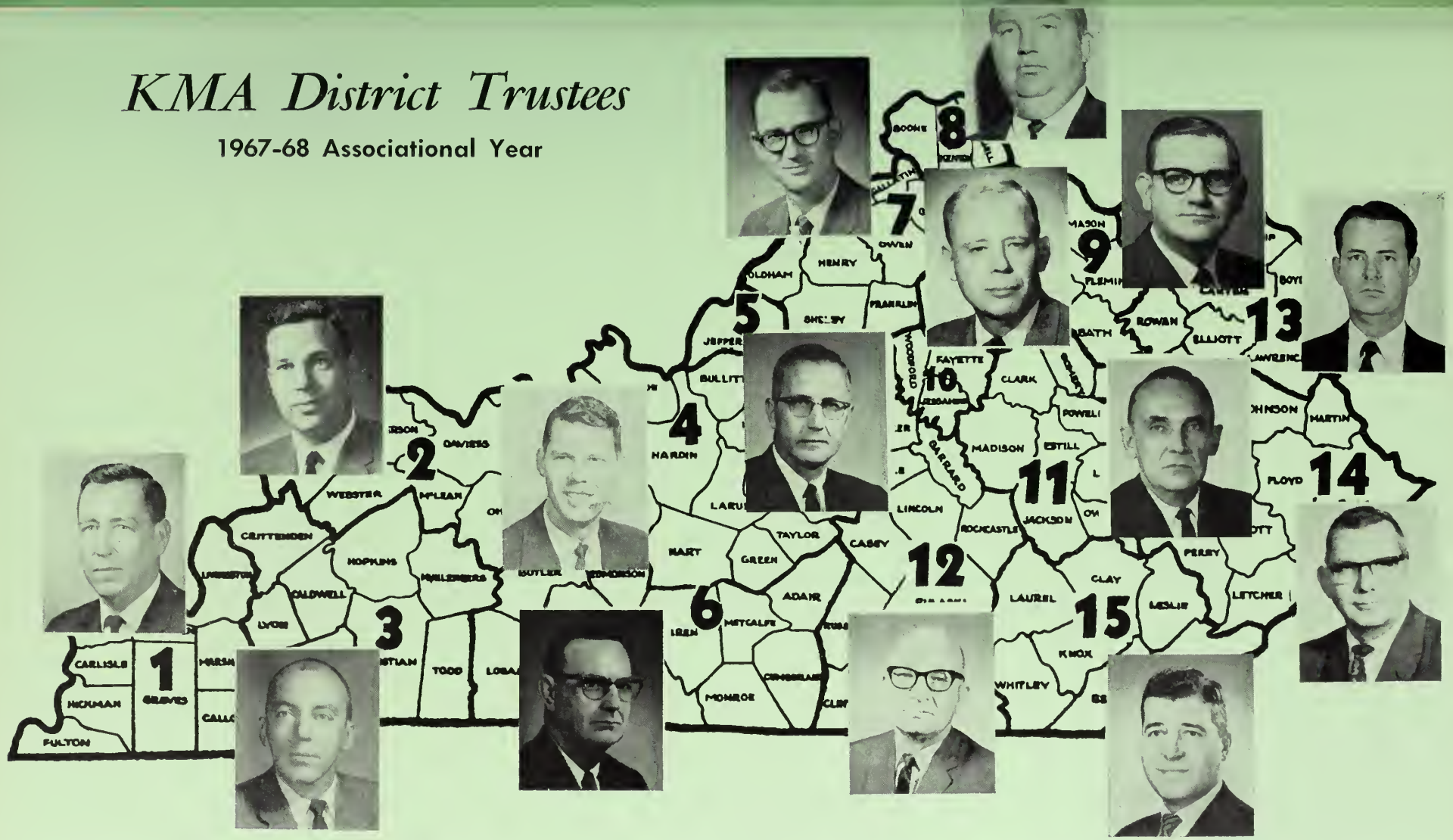
The House of Delegates will elect five district trustees at its second session, Wednesday, September 25, 1968. The trustees to be elected will be nominated by the delegates of their respective districts at a meeting immediately following the first session of the House on Monday, September 23. The committee will report its nominees at the close of the first scientific session on Tuesday, September 24. At the final meeting of the House Wednesday evening, September 25, nominations may be made from the floor. All nominations are considered and acted upon by the delegates at this final session.

Districts electing new trustees for three year terms are: **FIRST DISTRICT** (incumbent Joseph R. Miller, M.D., Benton); **THIRD DISTRICT** (incumbent Gabe A. Payne, M.D., Hopkinsville); **FOURTH DISTRICT** incumbent Henry S. Spalding, M.D., Bardstown); **TWELFTH DISTRICT** (incumbent Robert F. Long, M.D., Somerset); **FOURTEENTH DISTRICT** (incumbent Ballard W. Cassady, M.D., Pikeville). With the exception of Doctor Payne who has served two full terms, all are eligible for re-election.

An amendment to the KMA Constitution will be voted on in September and if approved, will require an alternate trustee to be elected from each Trustee District. All districts should present their nominations for this office to the KMA Nominating Committee at its September 23 meeting following the first session of the **House of Delegates.**

KMA District Trustees

1967-68 Associational Year



1. JOSEPH R. MILLER, Benton
2. WILLIAM W. HALL, Owensboro
3. GABE A. PAYNE, JR., Hopkinsville
4. HENRY S. SPALDING, Bardstown
5. GEORGE A. SEHLINGER*, Louisville
6. REX E. HAYES, Glasgow
7. DONALD CHATHAM, Shelbyville
8. LEROY C. HESS, Florence
9. J. C. CANTRILL, Georgetown
10. ANDREW MOORE, Lexington
11. DOUGLAS H. JENKINS*, Richmond
12. ROBERT F. LONG, Somerset
13. WALTER L. CAWOOD*†, Ashland
14. BALLARD W. CASSADY, Pikeville
15. E. C. SEELEY*, London

† *Chairman of the Board*
* *Member of the Executive Committee*

Officers of the KMA House of Delegates

SPEAKER

Richard F. Greathouse, M.D., Louisville



Doctor Greathouse was vice-speaker of the House and a delegate from the Jefferson County Medical Society before becoming speaker of the KMA House of Delegates in 1966. He is a 1951 graduate of the University of Louisville School of Medicine and has practiced pediatrics in Louisville since 1954. Doctor Greathouse is a past president of the Louisville Pediatric Society and former secretary-treasurer of KEMPAC. He is an assistant clinical professor of pediatrics at the University of Louisville School of Medicine.

VICE-SPEAKER

Carl C. Cooper, M.D., Bedford



Before becoming vice-speaker of the KMA House of Delegates, Doctor Cooper was a vice president and former alternate delegate to the AMA. A 1952 graduate of the University of Louisville School of Medicine, Doctor Cooper, a general practitioner, is a member of the American Academy of General Practice and a past vice-president of the Kentucky Academy of General Practice. He has represented KMA on the Kentucky Health Council and has served as chairman of the Senior Day Committee and as a member of the Council on Communications and Public Service.

KMA Delegates

ADAIR
James C. Salato, Columbia

ALLEN
Earl P. Oliver, Scottsville

ANDERSON
Boyd Caudill, Lawrenceburg

BALLARD
Glenn Baird, Bandana

BARREN
William H. Bryant, Glasgow

BATH

BELL
Francis A. Forde, Middlesboro
Charles B. Stacy, Pineville

BOONE
John D. Ammon, Covington

BOURBON
Richard Wever, Paris

BOYD
John Harrison, Ashland
Max Wheeler, Ashland

BOYLE
John M. Baird, Danville

BRACKEN
J. M. Stevenson, Brooksville

BREATHITT
C. F. Lewis, Jackson

BRECKINRIDGE
James G. Sills, Hardinsburg

BULLITT
W. B. Hamilton, Shepherdsville

BUTLER
D. G. Miller, Morgantown

CALDWELL
Ralph Cash, Princeton

CALLOWAY
C. C. Lowry, Murray

CAMPBELL-KENTON
Carl J. Brueggemann, Covington
Donald K. Dudderar, Newport
Thomas L. Heavern, Jr., Newport
Donald Janney, Covington
Louis J. Nutini, Erlanger
W. Vinson Pierce, Covington

CARLISLE

CARROLL
Edgar S. Weaver, Carrollton

CARTER

CASEY
George W. Sweeney, Liberty

CHRISTIAN
W. Faxon Payne, Hopkinsville
Norma T. Shepherd, Hopkinsville

CLARK

CLAY
W. E. Becknell, Manchester

CLINTON
E. A. Barnes, Albany

CRITTENDEN
R. M. Brandon, Marion

CUMBERLAND
Robert Chambliss, Burkesville

DAVIESS
J. S. Oldham, Owensboro
R. J. Phillips, Owensboro
Joseph C. Stiles, Owensboro

EDMONSON

ELLIOTT

ESTILL
Charles E. Terry, Irvine

FAYETTE
John F. Berry, Jr., Lexington
Leslie W. Blakey, Lexington
M. Cary Blaydes, Lexington
Peter P. Bosomworth, Lexington
N. L. Bosworth, Lexington
Thomson R. Bryant, Jr., Lexington
Winston L. Burke, Lexington
Richard D. Floyd, Lexington
Carl H. Fortune, Lexington
David A. Hull, Lexington
Irving F. Kanner, Lexington
Richard B. McElvein, Lexington
David B. Stevens, Lexington

FLEMING
Samuel W. Gehring, Flemingsburg

FLOYD
Lowell Martin, Martin

FRANKLIN
Harold L. Johnson, Frankfort
Sanford L. Weiler, Frankfort

FULTON
R. W. Bushart, Fulton

GALLATIN

GARRARD
Paul J. Sides, Lancaster

GRANT
Fred R. Scroggin, Dry Ridge

GRAVES
C. F. Burnett, Mayfield

GRAYSON
A. L. Embry, Millwood

GREEN
George C. Cheatham, Greensburg

GREENUP
Billy Riddle, South Shore

HANCOCK
B. P. Smith, Hawesville

HARDIN
Fred C. Rainey, Elizabethtown

HARLAN
Henry C. Evans, Harlan
Doane Fischer, Harlan

HARRISON
Henry H. Moody, Cynthiana

HART
J. E. McAfee, Horse Cave

HENDERSON
Kenneth Eblen, Henderson
Charles Kissinger, Henderson

HENRY
Robert Houston, Eminence

HICKMAN
C. J. Mills, Clinton

HOPKINS
Faull Trover, Madisonville
Loman C. Trover, Madisonville

JACKSON
D. L. Petersen, McKee

JEFFERSON
Harold W. Baker, Louisville
James G. Baker, Louisville
Ralph Denham, Louisville
William Durham, Louisville
Harold G. Eskind, Louisville
Frank Gaines, Louisville
John Goldsborough, Louisville
Richard Greathouse, Louisville
Cecil Grumbles, Louisville
N. I. Handleman, Louisville
John Hemmer, Louisville
Herman Mahaffey, Louisville
Roy A. Martin, Louisville
Edward Maxwell, Louisville
Robert L. McClendon, Louisville
William C. Mitchell, Louisville
Herman Moore, Louisville
F. Albert Olash, Louisville
Bernard I. Popham, Louisville
John Robbins, Louisville
Carroll Robie, Louisville
W. Fielding Rubel, Louisville
S. Randolph Scheen, Louisville
Charles C. Smith, Louisville
Donn L. Smith, Louisville
Robert C. Tate, Louisville
Robert S. Tillett, Louisville
Donald Varga, Louisville
William VonderHaar, Louisville
Will W. Ward, Jr., Louisville
Lloyd Yopp, Louisville

JESSAMINE
J. Sankey Williams, Nicholasville

JOHNSON
Glenn R. Powell, Paintsville

KNOTT
D. G. Barker, Hindman

KNOX
H. L. Bushey, Barbourville

LARUE
Marion A. Douglas, Jr., Magnolia

LAUREL
Paul R. Smith, London

LAWRENCE
Lloyd M. L. Browning, Louisa

LEE

LESLIE
Mary Pauline Fox, Hyden

LETCHER
Jim B. Tolliver, Whitesburg

LEWIS

LINCOLN
Maxwell Kimball, Stanford

LIVINGSTON

LOGAN
Robert H. Shipp, Russellville

LYON
Robert H. Hyde, Eddyville

McCRACKEN

McCREARY
H. A. Perry, Whitley City

McLEAN
W. G. Edds, Calhoun

MADISON
R. Eugene Bowling, Richmond
Clifford Kerby, Berea

MAGOFFIN

MARION
Robert H. Wilbur, Lebanon

MARSHALL
Keith Ellis, Benton

MARTIN
Raymond D. Wells, Inez

MASON

MEADE

MENIFEE
D. L. Graves, Frenchburg

MERCER
E. H. John, Harrodsburg

METCALFE

MONROE
John Marsh, Gamaliel

MONTGOMERY
R. J. Salisbury, Mt. Sterling

MORGAN
George Bellamy, West Liberty

MUHLENBERG
Robert Robbins, Greenville

NELSON
Emmett Wood, Bardstown

NICHOLAS
W. R. Kingsolver, Carlisle

OHIO
Robert Norsworthy, Hartford

OLDHAM

OWEN
Oscar A. Cull, Owenton

OWSLEY
M. B. Gabbard, Booneville

PENDLETON
Robert L. McKenney, Falmouth

PERRY
Keith Cameron, Ary

PIKE

POWELL
Charles G. Noss, Stanton

PULASKI
S. B. Kelley, Somerset
William M. Wyatt, Somerset

ROBERTSON

ROCKCASTLE

ROWAN
F. Calvin Bigler, Morehead

RUSSELL
Charles E. Peck, Russell Springs

SCOTT
D. Vertrees Hollingsworth, Georgetown

SHELBY-HENRY-OLDHAM
W. P. McKee, Shelbyville

SIMPSON
Airzzie Green, Jr., Franklin

SPENCER
W. K. Skaggs, Taylorsville

TAYLOR

TODD
Ralph D. Lynn, Elkton

TRIGG
Thornton Bryan, Cadiz

TRIMBLE
Carl Cooper, Jr., Bedford

UNION
Wallas N. Bell, Sturgis

WARREN-BUTLER-EDMONSON
Paul J. Parks, Bowling Green
J. O. Willoughby, Bowling Green

WASHINGTON
M. A. Coyle, Springfield

WAYNE
John W. Simmons, Monticello

WEBSTER
Paul M. Taylor, Providence

WHITLEY
Harold B. Barton, Corbin

WOLFE

WOODFORD
C. Noel Hall, Versailles

Reference Committee Activity

Speaker Richard F. Greathouse, M.D., Louisville, will refer **all officers' and committees' reports and resolutions** to one of six reference committees **at the first meeting of the KMA House of Delegates at 9 a.m. Monday, September 23.** Reference committee chairmen will meet for briefing sessions at 12:30 p.m. Monday in Room 317, Kentucky Hotel. **Reference committees will meet on the mezzanine floor of the Kentucky Hotel at 2 p.m. Monday, September 23 and any KMA member wishing to testify on any resolution or report is urged to be present.** These open sessions will last at least one hour in order to permit all who wish to speak to be heard. Following the open hearings, the committees will go into executive sessions to study the reports, review the testimony and write their reports to the House.

Recommendations of the committees will be presented **at the final session of the House Wednesday night, September 25,** in the Terrace Room, Kentucky Hotel. The reference committees appointed by Doctor Greathouse to serve during the 1968 session are listed below.

1968 Reference Committee Appointments

REFERENCE COMMITTEE NO. 1
Officers and Board of Trustees
Parlor A

Thomas L. Heavern, M.D., Highland Heights, Chairman
N. Lewis Bosworth, M.D., Lexington
Mary Pauline Fox, M.D., Hyden
R. J. Phillips, M.D., Owensboro
Robert S. Tillett, M.D., Louisville

REFERENCE COMMITTEE NO. 2
Scientific Assembly and Medical Education
Room 204

C. C. Lowry, M.D., Murray, Chairman
Peter P. Bosomworth, M.D., Lexington
Donn L. Smith, M.D., Louisville
Paul R. Smith, M.D., London
Loman C. Trover, M.D., Madisonville

REFERENCE COMMITTEE NO. 3
Legislative Activities
Parlor B

Harold B. Barton, M.D., Corbin, Chairman
W. Donald Janney, M.D., Covington
W. Faxon Payne, M.D., Hopkinsville
Charles C. Smith, Jr., M.D., Louisville
David B. Stevens, M.D., Lexington

REFERENCE COMMITTEE NO. 4
Public Service and Medical Services
Parlor C

Kenneth M. Eblen, M.D., Henderson, Chairman
John W. Harrison, M.D., Ashland
Edward N. Maxwell, M.D., Louisville
Robert E. Robbins, M.D., Greenville
Richard J. Wever, M.D., Paris

REFERENCE COMMITTEE NO. 5
Governmental Medical Services
Parlor D

Walter Johnson, M.D., Paducah, Chairman
Thomson R. Bryant, Jr., M.D., Lexington
Harold L. Buchey, M.D., Barbourville
Frank M. Gaines, M.D., Louisville
Harold L. Johnson, M.D., Frankfort

REFERENCE COMMITTEE NO. 6
Constitution and Bylaws and Special Committees
Room 203

Robert L. McClendon, M.D., Louisville, Chairman
John M. Baird, M.D., Danville
Donald L. Graves, M.D., Frenchburg
Ralph D. Lynn, M.D., Elkton
Dixie Snider, M.D., Springfield

OFFICIAL CALL

KMA Annual Meeting

To the officers and members of the component county medical societies of the Kentucky Medical Association.

Meeting Place

The Annual Meeting of the KMA will convene on Tuesday, Wednesday and Thursday, September 24, 25 and 26, at Convention Center, Louisville. The first general session will be called to order at 8:50 a.m. Tuesday.

The House of Delegates

The first regular session of the House of Delegates will convene at 9 a.m., Monday, September 23. The second regular business session will begin at 7 p.m., Wednesday, September 25. A subscription dinner will be served to the delegates preceding the session at 6 p.m. Both session will be held in the Terrace Room of the Kentucky Hotel.

Registration

The registration desk will open at the Terrace Room of the Kentucky Hotel at 8 a.m., Monday, September 23, and at 5:30 p.m., Wednesday, September 25. It will be open in the technical exhibit hall of Convention Center from 8 a.m. to 5 p.m. Tuesday, September 24; Wednesday, September 25; and Thursday, September 26.

Nominating Committee To Meet After First Session of House

Following the close of the first session of the House of Delegates Monday, September 23, the Nominating Committee will hold an open meeting at the alcove in the far end of the Terrace Room of the Kentucky Hotel.

All members have the privilege of conferring with the Committee during its meeting. Final recommendations will be reported at the end of the first scientific session Tuesday morning, September 24.

Nominations may also be made from the floor at the second meeting of the House of Delegates, Wednesday evening, September 25. The House will vote on the nominees at the close of this session.

Members of the Nominating Committee, chaired by W. Faxon Payne, M.D., Hopkinsville, are Ralph M. Denham, M.D., Louisville; Meredith J. Evans, M.D., Middlesboro; David A. Hull, M.D. and David B. Stevens, M.D., Lexington.

MAKE YOUR RESERVATIONS NOW

Hotel reservations for the KMA Annual Meeting September 24-26 should be made now in order to be sure of rooms. Excellent accommodations at hotels and motels in downtown Louisville or surrounding sections of the city are available and within easy access of Convention Center.

New KMA Officers To Be Named At Final Session of House

The KMA officers for the 1968-69 Associational year will be elected by the House of Delegates during its final session Wednesday evening, September 25.

An amendment to the KMA Constitution will be voted on in September which, if approved, will require an alternate trustee to be elected from each Trustee District. All districts should then present their nominations for this office to the KMA Nominating Committee at its meeting September 23, following the first session of the House of Delegates.

Another amendment to the Constitution to be voted on would authorize one vice president instead of three. If approved by the House, only one vice president, to be from the same area as the president, will be elected.

Officers to be selected by the House are:

President-Elect	**(Eastern)**	**One Year**
***Vice Presidents**	**(Central)**	**One Year**
	(Eastern)	**One Year**
	(Western)	**One Year**

****Speaker of the House (Richard F. Greathouse, M.D., Louisville, incumbent)**

Three Years

****Vice Speaker of the House (Carl Cooper, Jr., M.D., Bedford, incumbent)**

Three Years

****AMA Delegate (J. Thomas Giannini, M.D., Louisville, incumbent)**

Two Years

****AMA Alternate Delegate (Charles G. Bryant, M.D., Louisville, incumbent)**

Two Years

Five trustees will be elected for regular three-year terms. Districts electing new trustees are:

****First District (Joseph R. Miller, M.D., Benton, incumbent)**

Third District (Gabe A. Payne, M.D., Hopkinsville, incumbent)

****Fourth District (Henry S. Spalding, M.D., Bardstown, incumbent)**

****Twelfth District (Robert F. Long, M.D., Somerset, incumbent)**

****Fourteenth District (Ballard W. Cassady, M.D., Pikeville, incumbent)**

Doctor Payne has served two full terms as district trustee and is not eligible to succeed himself.

**Pending House action on amendment*

***Eligible for re-election*

Annual Meeting



The Kentucky Hotel
KMA Annual Meeting Headquarters

Special Features

SCIENTIFIC PROGRAM on September 24, 25 and 26 will p resent four sessions of Color TV and Panel Discussions featuring top national personalities in the field of medicine. Themes will be "Respiratory Diseases," "Office Examinations," "Emergency Medical Care" and "Huma n Sexuality."

THE HOUSE OF DELEGATES, KMA's top policy-making bo dy, will hold two sessions during the Annual Meeting. The first regular session will convene at 9 a.m., Monda y, September 23 and the second session will begin at 7 p.m., Wednesday, September 25, following a subscription dinner. Both meetings will be in the Terrace Room of the Kentucky Hotel. Officers will be elected at the second session.

SIXTEEN SPECIALTY GROUPS will meet in conjunction with the KMA Annual Meeting. Nine meetings are scheduled at 2 p.m., Tuesday, September 24, and seven grou ps will meet at 2 p.m., Thursday, September 26. All KMA members are invited to attend the meetings of t heir choice.

THE PRESIDENT'S LUNCHEON will feature guest speaker George Nigh, Lt. Governor of Oklahoma, discussing "It's A Fast, Fast World." The luncheon will begin at 11:50 a.m., Wednesday, September 25 in the Flag Room of the Kentucky Hotel. Presentations of KMA's three top awards will be made at this event.

SEVENTY-SIX TECHNICAL EXHIBITS will be on display in Convention Center near the Assembly Hall where the scientific sessions will take place. A variety of products and services of interest to physicians will be represented, providing an excellent opportunity for members to gain information about the latest advances in their fields of interest.

ALUMNI REUNIONS have been planned for the five-year classes of the University of Louisville School of Medicine.

THE WOMAN'S AUXILIARY to KMA will hold its 46th Annual Convention September 23, 24 and 25 at the Kentucky Hotel.

New Member Orientation Course To Be Offered September 23

The Seventh KMA Orientation Course will be offered to approximately 130 new members Monday, September 23, in the Mirror Room of the Kentucky Hotel, just prior to the opening of the 1968 Annual Meeting.

An outstanding program designed to better equip the new KMA member in meeting present-day responsibilities as a citizen and as a physician has been prepared by the Committee on Communication and Health Education. Beginning promptly at 8:30 a.m.. following registration at 8:00 a.m., the informative, fast-moving session will adjourn by 12:30 p.m.

KMA members who have joined the Association during the past two years and have not as yet attended an Orientation Program will receive letters of invitation. Any KMA member, however, is most welcome to attend the course. The program to be presented in the Seventh Course, September 23, follows.

KMA ORIENTATION PROGRAM

N. Lewis Bosworth, M.D., Lexington
Moderator

8:00 a.m. **Registration**

8:30 a.m. **Welcome and Introduction**
George F. Brockman, M.D., Greenville
KMA President

8:35 a.m. **The Wife's Role in Organized Medicine**
Mrs. Charles Kissinger, Henderson
President, Woman's Auxiliary to KMA

Structure-Function-Policies in Organized Medicine

8:50 a.m. **"County Medical Society"**
Walter Johnson, M.D., Paducah
Past President
McCracken County Medical Society

9:05 a.m. **"Kentucky Medical Association"**
S. Randolph Scheen, M.D., Louisville
KMA Secretary

9:20 a.m. **"American Medical Association"**
Robert C. Long, M.D., Louisville
Member, AMA Board of Trustees

9:35 a.m. **"Community Relations"**
Charles Rutledge, M.D., Hazard
Delegate to AMA

9:55 a.m. **"Health Insurance" (Blue Cross-Blue Shield)**
J. Ed McConnell, Louisville
President
Blue Cross Hospital Plan, Inc.

10:10 a.m. **"Health Insurance" (Commercial)**
Francis J. Batridge
Metropolitan Life Insurance Company

10:25 a.m. **COFFEE BREAK**

10:40 a.m. **"Cults"**
David B. Stevens, M.D., Lexington
Chairman, KMA Cults Committee

10:55 a.m. **"Medical Ethics"**
Clyde C. Sparks, M.D., Ashland
KMA Past President

11:15 a.m. **"Medico-Legal Aspects"**
E. Gaines Davis, Jr., Frankfort
KMA Legal Counsel

11:35 a.m. **"Medico-Press Relations"**
William Gladden, Louisville
Director of Public Relations
WAVE, Inc.

11:50 a.m. **"The National Scene for Medical Legislation"**
John C. Quertermous, M.D., Murray
Chairman, KEMPAC Board of Directors

12:05 p.m. **"State Legislation and the Key Man System"**
Fred C. Rainey, M.D., Elizabethtown
Chairman for State Affairs
KMA Committee on Legislative Activities

12:15 p.m. **"The Physician's Role in Legislation and Politics"**
Hoyt D. Gardner, M.D., Louisville
Secretary-Treasurer
American Medical Political
Action Committee

Emergency Message Phone Number To Be 584-2201 at Meeting

You may be reached through the Message Center during the Annual Meeting at the number 584-2201 (Area Code 502) in case of an emergency or for routine messages. The Message Center will be located in the center of the Technical Exhibit Hall and staffed at all times by trained employees of South Central Bell.

Emergency calls only will be posted on the blackboards in the entrance lobby of Convention Center and in the Scientific Assembly Hall. Please check frequently at the Message Center where all messages will be on file until you call for them.

Paging of individual physicians will not be possible due to the arrangement of facilities for the meeting.

Locating other physicians through the Message Center will be possible by calling 584-2201 and asking that your message be delivered.

The Kentucky Hotel phone number is 587-1181. Have your calls directed to the Terrace Room if you are attending the meetings of the House of Delegates. Your name will be posted on the blackboard at the front of the room when you receive a call.

The Message Center is in a convenient and efficient location for the transfer of messages and you are urged to make use of this facility to receive your calls promptly. Remember to leave the number at your home, office and hospital.

REGISTRATION INFORMATION

You are requested to register as early as possible at the Registration Booth in the north end of the Convention Hall (in the Technical Exhibit Hall). The booth will open at 8 a.m. Tuesday, Wednesday and Thursday, September 24, 25 and 26.

Please wear your badge at all times while attending the meeting.

1968 Annual Meeting Program Summary

The Kentucky Medical Association

September 21, 22, 23, 24, 25, and 26

Louisville

SATURDAY, SEPTEMBER 21

6:30 p.m. Dinner Meeting, Board of Directors, Ky. Physicians Mutual ..... Pendennis Club

SUNDAY, SEPTEMBER 22

12:30 p.m. Luncheon Meeting, KMA Board of Trustees ..... Parlor A, Kentucky Hotel

MONDAY, SEPTEMBER 23

8:30 a.m. Orientation Program, New KMA Members ..... Mirror Room, Kentucky Hotel
9:00 a.m. First Meeting, KMA House of Delegates ..... Terrace Room, Kentucky Hotel
12:30 p.m. Luncheon for Reference Committee Chairmen ..... Room 317, Kentucky Hotel
2:00 p.m. Reference Committee Meetings ..... Parlors A, B, C, D—Rooms 203 & 204, Kentucky Hotel
6:00 p.m. KEMPAC Reception, Banquet and Seminar ..... Flag Room, Kentucky Hotel

TUESDAY, SEPTEMBER 24

8:50 a.m. Opening Ceremonies ..... Scientific Assembly Hall, Convention Center
9:00 a.m. Registration ..... Technical Exhibit Hall, Convention Center
9:00 a.m. First Scientific Session ..... Scientific Assembly Hall, Convention Center
2:00 p.m. Specialty Group Sessions, Convention Center *(Nine Specialty Group Sessions will be held simultaneously at this time. Any KMA member may attend any of these meetings. There will be no General Session at this time. See pages 740-742 in program.)*

WEDNESDAY, SEPTEMBER 25

9:00 a.m. Second Scientific Session ..... Scientific Assembly Hall, Convention Center
11:50 a.m. President's Luncheon ..... Flag Room, Kentucky Hotel
2:00 p.m. Third Scientific Session ..... Scientific Assembly Hall, Convention Center
5:00 p.m. Meeting, Board of Trustees ..... Parlor B—Dinner at 6:00, Parlor A, Kentucky Hotel
6:00 p.m. Subscription Dinner and Meeting, House of Delegates ..... Terrace Room, Kentucky Hotel

THURSDAY, SEPTEMBER 26

9:00 a.m. Fourth Scientific Session ..... Scientific Assembly Hall, Convention Center
12:00 noon Board of Trustees Luncheon and Afternoon Meeting ..... Parlor A, Kentucky Hotel
2:00 p.m. Specialty Group Sessions, Convention Center *(Seven Specialty Group Sessions will be held simultaneously at this time. Any KMA member may attend any of these meetings. There will be no General Session. See page 745 in program.)*

A 30-minute intermission has been scheduled during each morning and afternoon Scientific Session for visiting Scientific and Technical Exhibits.

(Full Scientific Program Starts on page 740)

The Kentucky Medical Association
SCIENTIFIC PROGRAM
John Gaunt Brooks Memorial Meeting
Convention Center, Louisville

TUESDAY, SEPTEMBER 24
MORNING SESSION

General Session

George F. Brockman, M.D., Greenville, KMA President, Presiding

8:50 **Opening Ceremonies**
Welcome—John A. Bishop, M.D., Jeffersontown, President, Jefferson County Medical Society
Invocation—The Rev. Wilfred Myll, Pastor, St. Matthews Episcopal Church

9:00 **"Recent Advances in the Care of Newborn Infants"**
Jerold Lucey, M.D., Burlington, Vt.

9:20 **"Syphillis Management, 1968"**
Sidney Olansky, M.D., Atlanta, Ga.

9:40 **President's Address**
George F. Brockman, M.D.

10:00 **Intermission to Visit Exhibits**

10:30 **COLOR TV CLINIC: "Respiratory Diseases"**
Peter Bosomworth, M.D., Lexington, Moderator
Nathan I. Handleman, M.D., Louisville
John Hedley-Whyte, M.B., Boston, Mass.
Harold Rosenbaum, M.D., Lexington
David Spain, M.D., Brooklyn, N.Y.
Kent Trinkle, M.D., Lexington

TUESDAY, SEPTEMBER 24
AFTERNOON SESSION

Specialty Group Meetings

(Nine Specialty Groups will meet on Tuesday afternoon with intermissions to visit the Scientific and Technical Exhibits. There will be no general session at this time. KMA members are invited to attend all of these meetings.)

Kentucky Society of Anesthesiologists
Room 205, Convention Center

2:00 **"Problems in Weaning Patients from Ventilators"**
John Hedley-Whyte, M.B., Boston, Mass.

2:30 **"Anesthetic Hazards of Obesity"**
Ronald W. Dunbar, M.D., Lexington

2:45 **"A Comparative Study of Self-inflating Resuscitation Bags"**
Lloyd F. Redick, M.D., Lexington

3:00 **Intermission to Visit Exhibits**

3:30 **"Penthrane Today—Abbott Laboratories"**
Discussant to be announced

4:00 **Business Meeting**

JEROLD F. LUCEY, M.D.
Burlington, Vermont



Professor of pediatrics, University of Vermont College of Medicine. M.D., 1952, New York University College of Medicine. Chairman, Committee on Fetus and Newborn, American Academy of Pediatrics. Fellow, American Academy of Pediatrics. Consultant, National Board of Medical Examiners Pediatric Section. Member, Society for Pediatric Research, American Pediatric Society. Research interest in investigation of etiology of neonatal jaundice and kernicterus.

SIDNEY OLANSKY, M.D.
Atlanta, Georgia



Professor of medicine and chief, section of dermatology, Emory University School of Medicine. M.D., 1940, Glasgow University, Scotland. Past president and secretary, Southern Medical Association dermatology section. Member, Board of Directors, American Academy of Dermatology and Syphilology, National Serology Advisory Committee to Surgeon General of Public Health Service. Author or co-author of 126 papers relating to venereal diseases and dermatology.

JOHN HEDLEY-WHYTE, M.B.
Boston, Massachusetts



Associate professor, Harvard Medical School. Anaesthetist-in-Chief, Beth Israel Hospital. M.B., 1958, St. Bartholomew's Hospital Medical School. Fellow, American College of Anesthesiology. Life member, Faculty of Anaesthetist, Royal College of Surgeons of England. Member, American Society of Anesthesiologists, International Anesthesia Research Society. Reviewer, Journal of Clinical Investigation. Ad hoc consultant, General Medical Research Program Project Committee, National Institutes of Health.

Kentucky Chapter, American College of Chest Physicians (Meeting with the Kentucky Industrial Medical Association) Room 104 Convention Center

Fireside Conferences Beginning at 2:00

2:00 **"Tuberculosis and Fungus Infections of the Lung"**
Michael L. Furcolow, M.D., Lexington
Alex N. Saliba, M.D., Louisville

2:00 **"Radiology of Chest and Lung Scanning"**
Herbert E. Brizel, M.D., Louisville
Harold D. Rosenbaum, M.D., Lexington

2:00 **"Cardiology"**
Noble Fowler, M.D., Cincinnati, Ohio
Robert Rainey, M.D., Louisville
Ralph Shabetai, M.D., Lexington

2:00 **"E.K.G."**
Kirk Bowman, M.D., Madisonville
Herbert L. Clay, M.D., Louisville

2:00 **"Industrial Cardio-Pulmonary Problems and Emphysema"**
Gilbert L. Hamilton, M.D., Harlan
Edward M. Kline, M.D., New York, N.Y.

Kentucky Dermatological Society General Hospital

2:00 **Skin Clinic and Discussion**
Paul Mapother, M.D., Louisville, Moderator

3:00 **Intermission to Visit Exhibits**

3:30 **General Discussion of Cases Presented**
Sidney Olansky, M.D., Atlanta, Ga.

Kentucky Industrial Medical Association (Meeting with the Kentucky Chapter, American College of Chest Physicians) Room 104 Convention Center

Fireside Conferences Beginning at 2:00

Kentucky Obstetrical and Gynecological Society Second Floor Auditorium, Convention Center

2:00 **"The Pill"**
Stewart A. Fish, M.D., Memphis, Tenn.

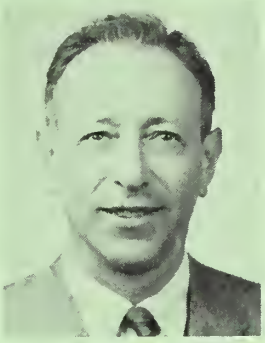
2:30 **"Estrogen Replacement Therapy—Internists' Point of View"**
William B. Stodghill, M.D., Louisville

3:00 **Intermission to Visit Exhibits**

3:30 **Panel Discussion: "Hormones in Modern Medical Practice"**
Silas Starr, M.D., Louisville, Moderator
William A. Blodgett, M.D., Louisville
Stewart A. Fish, M.D., Memphis, Tenn.
William B. Stodghill, M.D., Louisville

DAVID M. SPAIN, M.D.

Brooklyn, New York



Director of pathology, Brookdale Hospital Center. Clinical professor of pathology, Columbia University College of Physicians and Surgeons. Former chief medical examiner, Westchester County. M.D., 1936, University of Maryland School of Medicine. Member State Board of Medical Examiners of New York. Associate editor, Journal of Diseases of the Chest. Editorial board, American Review of Respiratory Diseases. Member College of American Pathologists, American Society of Clinical Pathologists, American College of Chest Physicians.

WILLIAM S. SMITH, M.D.

Ann Arbor, Michigan

Professor of surgery and head, section of orthopaedic surgery, University of Michigan Medical Center. M.D., 1943, University of Michigan. Kappa Delta Award recipient for outstanding scientific contribution to field of orthopaedic surgery. Member, American Orthopaedic Association, Orthopaedic Research Society, American Association for the Surgery of Trauma. Fellow, American Academy of Orthopaedic Surgeons and American College of Surgeons.



KEITH WATERHOUSE, M.D.

Brooklyn, New York



Professor of surgery and head, division of urology, State University of New York, Downstate Medical Center. M.D., 1953, Oxford University Medical School. M. A., 1957, University of Cambridge. Fellow, American College of Surgeons, American Academy of Pediatrics, New York Academy of Medicine. Past president Brooklyn-Long Island Urological Society. Member, American Urological Association, American Association of Genitourinary Surgeons, Royal College of Surgeons.

Kentucky Orthopaedic Society
Room 101, Convention Center

2:00 "Frocture Dislocations of the Spine: Immobilized with Horrington Rods"
Henry Danaceau, M.D., Lexington

2:30 "A Thirty Yeor Follow-Up of Congenitol Dislocotion of the Hip"
William S. Smith, M.D., Ann Arbor, Mich.

3:00 Intermission to Visit Exhibits

3:30 "Immediote Post-Operotive Fitting"
O. J. Hurt, M.D., Louisville

4:00 "Hookworm Infestation of Bone"
Richard O'Conner, M.D., Louisville

Kentucky Society of Pathologists
Room 203, Convention Center

2:00 "Radiotion Induced Osteogenic Sarcoma of the Orbit"
T. Yoneyama, M.D., Lexington
Robert Greenlaw, M.D., Lexington

2:00 "Phage lysis of Stophlococcus Aureous Exposed to Acridine Oronge"
Daniel Weiss, M.D., Lexington

2:40 "Evoluotion of K. Enterobacter in Normol Flora and Infections"
Herbert Braunstein, M.D., Lexington
E. Tucker, M.D., Lexington

3:00 Intermission to Visit Exhibits

3:30 "Epidermology ond Significance of Trochoel Bronchiol Metoplasio"
David M. Spain, M.D., Brooklyn, N.Y.

Kentucky Chapter, American Academy of Pediatrics
Assembly Hall, Convention Center

2:00 Color TV Clinic: "Assessment of Signs and Symptoms in the Newborn"
Jerold F. Lucey, M.D., Burlington, Vt.
Billy F. Andrews, M.D., Louisville
Robert A. Beargie, M.D., Lexington

3:00 Intermission to Visit Exhibits

3:30 "Care of the Newborn"
Jerold F. Lucey, M.D., Burlington, Vt.
Billy F. Andrews, M.D., Louisville
Robert A. Beargie, M.D., Lexington

4:00 Panel Discussion: "Problems in the Newborn Period"
Jerold F. Lucey, M.D., Burlington, Vt.
Billy F. Andrews, M.D., Louisville
Robert A. Beargie, M.D., Lexington

Kentucky Urological Society
Room 208, Convention Center

2:00 "Investigotion, Diognosis and Treatment of Lower Urinory Troct Obstruction in Children"
Keith Waterhouse, M.D., Brooklyn, N.Y.

3:00 Intermission to Visit Exhibits

3:30 Pyelogrom Hour

4:20 Business Meeting

EDWARD M. KLINE, M.D.
New York, New York



Medical director, General Electric Company. Assistant professor of clinical medicine, Cornell University. Assistant attending physician, New York Hospital. M.D., 1934, Western Reserve University. Fellow, American College of Physicians, American Academy of Occupational Medicine, Council on Clinical Cardiology, American Heart Association and Industrial Medical Association. Member American Industrial Hygiene Association and American Public Health Association.

NOBLE O. FOWLER, M.D.
Cincinnati, Ohio



Professor of medicine, University of Cincinnati. Director, Cardiac Research Laboratory, Cincinnati General Hospital. M.D., 1941, University of Tennessee College of Medicine. Chairman, Council on Clinical Cardiology Program Committee, American Heart Association. Editorial Board, American Heart Journal and The Heart Bulletin. Member, Association of University Cardiologists, American Physiological Society, American Federation for Clinical Research.

ROBERT J. FREEARK, M.D.
Chicago, Illinois



Professor of surgery, Northwestern University Medical School and Cook County Graduate School of Medicine. Director, division of surgery, and chairman, department of general surgery, Cook County Hospital. M.D., 1952, Northwestern University Medical School. Fellow, American College of Surgeons. Member, Chicago, Illinois, Midwest and Central Surgical Societies, American Association for the Surgery of Trauma, Western Surgical Association. Author, numerous medical articles and movies.

WEDNESDAY, SEPTEMBER 25
MORNING SESSION

General Session

Glenn W. Bryant, M.D., Louisville, Vice President (Central), Presiding

9:00 **COLOR TV CLINIC: "Office Examinations"**
Fred C. Rainey, M.D., Elizabethtown, Moderator
Walter S. Coe, M.D., Louisville
Richard L. Roth, M.D., Louisville
Sheldon Rovin, D.D.S., Lexington
William S. Smith, M.D., Ann Arbor, Mich.

10:00 **Intermission to Visit Exhibits**

10:30 **"Chronic Renal Failure from Urological Diseases: Treatment by Salt Balancing and Low Protein Diet"**
Keith Waterhouse, M.D., Brooklyn, N.Y.

10:50 **"The Examination of the Executive"**
Edward M. Kline, M.D., New York, N.Y.

11:10 **"Common Misconceptions Concerning Pulmonary Embolism"**
Noble Fowler, M.D., Cincinnati, Ohio

11:30 **Presentation of Scientific Exhibit Award**

PRESIDENT'S LUNCHEON
Flag Room, Kentucky Hotel

11:50 a.m.

George F. Brockman, M.D., Greenville, KMA President, presiding

Invocation
The Rev. R. Willard VanNostrand, Pastor
Beargrass Christian Church

Recognition
George F. Brockman, M.D.

Awards Presentation
Richard F. Grise, M.D., Bowling Green, Chairman, KMA Awards Committee

"It's a Fast, Fast World"
Lieutenant Governor George Nigh
Oklahoma City, Oklahoma

WEDNESDAY, SEPTEMBER 25
AFTERNOON SESSION

General Session

J. Sankey Williams, M. D., Nicholasville Vice President (Eastern), Presiding

2:00 **COLOR TV CLINIC: "Emergency Medical Care"**
William T. Rumage, Jr., M.D., Louisville, Moderator
William K. Keller, M.D., Louisville, Director

Case Presentations
Mark Fullmer, M.D., Lexington
Lawrence Goldberg, M.D., Louisville
Joseph Hiller, M.D., Lexington
Joseph Marshall, M.D., Louisville

Triage Officers
Robert J. Freeark, M.D., Chicago, Ill.
Ward O. Griffen, M.D., Louisville
Rudolf J. Noer, M.D., Louisville

(*Continued on next page*)

DONALD J. JOSEPH, M.D.

Columbia, Missouri



Associate clinical professor, chief of otoloryngology, University of Missouri School of Medicine. M.D., 1946, St. Louis University School of Medicine. M.S., 1953, Baylor University. Diplomate, American Board of Otolaryngology. Fellow, American Academy of Ophthalmology and Otolaryngology, American College of Surgeons. Former consultant to surgeon general in otolaryngology. Past president, Society of Military Otolaryngologists. Member, Military Surgeons Association, National Academy of Sciences.

PRISCILLA WHITE, M.D.

Boston, Massachusetts

Assistant professor of medicine, Tufts University Medical School. Consultant in diabetes, Boston Floating Hospital. M.D., 1923, Tufts College Medical School. Member American Diabetes Association, American College of Physicians, American Medical Women's Association. Recipient Elizabeth Blackwell citation, Hobart and William Smith College, 1949 and New York Infirmary, 1953.



JEROME F. WIOT, M.D.

Cincinnati, Ohio



Professor of radiology, University of Cincinnati. Director, department of radiology, Cincinnati General Hospital. M.D., 1953, University of Cincinnati College of Medicine. Diplomate, American Board of Radiology. Member, Cincinnati Academy of Medicine, Radiological Society of North America, American College of Radiology, Association of University Radiologists, Ohio State Radiological Society.

Consultants
Mohammad Atik, M.D., Louisville
Peter Bosomworth, M.D., Lexington
Lester R. Bryant, M.D., Lexington
James Harkess, M.D., Louisville
Allan Lansing, M.D., Louisville
Robert Lich, M.D., Louisville
Horace A. Norrell, M.D., Lexington
Harold Rosenbaum, M.D., Lexington

3:20 **Intermission to Visit Exhibits**

3:50 **"The Airway in an Emergency"**
Donald Joseph, M.D., Columbia, Mo.

4:10 **"The Unusual Diabetic"**
Priscilla A. White, M.D., Boston, Mass.

4:30 **"The Management of Critical Injuries"**
Robert J. Freeark, M.D., Chicago, Ill.

THURSDAY, SEPTEMBER 26

MORNING SESSION

General Session

Luther M. Wilson, Jr., M.D., Bowling Green, Vice President (Western), Presiding

9:00 **"Is This Chest Film Normal?"**
Jerome F. Wiot, M.D., Cincinnati, Ohio

9:20 **HUMAN SEXUALITY: "Toward Marital and Sexual Adjustment"**
Philip S. Crossen, M.D., Lexington

9:40 **HUMAN SEXUALITY: "Sexual Problems in Family Practice"**
William M. Sheppe, Jr., M.D., Charlottesville, Va.

10:00 **Intermission to Visit Exhibits**

10:30 **COLOR TV CLINIC: "Human Sexuality"**
Philip S. Crossen, M.D., Lexington, Moderator
John Cole, M.D., Lexington
Robert G. Heath, M.D., New Orleans, La.
Karl Olsen, M.D., Cleveland, Ohio
Stephen J. Zwirek, M.D., Lexington
PANEL DISCUSSION

Specialty Group Session
Kentucky EEN&T Society
Room 205, Convention Center

9:00 **"Full Thickness Postauricular Skin Graft To Replace Tissue About the Face and Nose"**
Robert C. Kratz, M.D., Newport
Discussion

9:30 **"Management of Malignancies of the Lip"**
Alvin C. Poweleit, M.D., Covington
Discussion

10:00 **PANEL DISCUSSION: "Ear Emergency"**
Francis J. Peisel, M.D., Louisville Moderator
Donald Joseph, M.D., Columbia, Mo.
Arthur L. Juers, M.D., Louisville
William Moore, M.D., Bowling Green

11:00 **Intermission to Visit Exhibits**

11:30 **Business Meeting**

WILLIAM M. SHEPPE, JR., M.D.

Charlottesville, Virginia



Associate professor of psychiatry at University of Virginia and executive assistant to the chief of psychiatry. Special psychiatric consultant to Department of Health, Education and Welfare. M.D., 1948, University of Virginia. Fellow, American Psychiatric Associatian Diplomate, American Board of Psychiatry. Past president, Neuropsychiatric Society of Virginia. Author, section of American Handbook of Psychiatry and many published papers.

ROBERT G. HEATH, M.D.

New Orleans, Louisiana



Professor and chairman, department of psychiatry and neurology, Tulane University School of Medicine. M.D., 1938, University of Pittsburgh. Associate editor and consultant, International Review of Neurobiology. Vice president, Society of Biological Psychiatry. Member, American Neurological Association, Southern Society for Clinical Research, Association for Psychoanalytic Medicine, and many others. Author of 230 scientific papers and three books.

KARL J. OLSEN, M.D.

Cleveland, Ohio



Cleveland Clinic Hospital staff member. Former instructor, Ohio State University and University of Minnesota. Consultant, physical medicine and rehabilitation, Rochester, Minnesota hospitals. M.D., 1952, Ohio State University. Member, American Academy of Physical Medicine, American Congress of Physical Medicine and Rehabilitation, American Association of Electromyography and Electradiagnosis, Ohio Society of Physical Medicine, American Associatian for the Advancement of Science.

THURSDAY, SEPTEMBER 26

AFTERNOON SESSION

Specialty Group Sessions

(Seven Specialty Groups will hold their meetings on Thursday afternoon and all KMA members are invited to attend the meetings of their choice. There will be no general scientific session at this time. Intermissions will be scheduled to visit the Scientific and Technical Exhibits.)

Kentucky EEN&T Society
Room 205, Convention Center

2:00 "Herpes Simplex"
Herbert E. Kaufman, M.D., Gainesville, Fla.

3:00 "Extraocular Muscle Involvement in Myopathic and Neuropathic Disease"
Jonathan Wirtschafter, M.D., Lexington

3:30 Intermission to Visit Exhibits

4:00 "Bullous Keratopathy"
Herbert Kaufman, M.D., Gainesville, Fla.

Kentucky Chapter, American Academy of General Practice
Assembly Hall, Convention Center

2:00 Color TV Clinic: "Evaluation of Rehabilitative Potential"
William P. VonderHaar, M.D., Louisville
Moderator
Karl Olsen, M.D., Cleveland, Ohio

3:00 Intermission to Visit Exhibits

Kentucky Chapter, American College of Physicians (Meeting with the Kentucky Diabetes Association)
Room 203, Convention Center

2:00 "Ophthalmopathy of Graves Disease"
Ronald D. Hamilton, M.D., Lexington

2:20 "Clinical Manifestations of Pheochromocytoma"
Ronald L. Sergent, M.D., Lexington
Matthew C. Darnell, Jr., M.D., Lexington

2:40 "Adult Diabetes Mellitus: A Critique of the Diagnosis"
James R. Hendon, M.D., Louisville
David White, M.D., Louisville

3:00 Intermission to Visit Exhibits

3:30 "The Management of Vascular Complications of Diabetes"
Priscilla A. White, M.D., Boston, Mass.

Kentucky Psychiatric Association
Room 204, Convention Center

2:00 "Schizophrenia: Studies of Pathogenesis"
Robert G. Heath, M.D., New Orleans, La.
Discussion

3:00 Intermission to Visit Exhibits

3:30 "Kentucky Mental Health Laws"
William K. Keller, M.D., Louisville

4:00 Business Meeting

Kentucky Association of Public Health Physicians
Room 207, Convention Center

2:00 "Human Sexual Behavior"
William Sheppe, M.D., Charlottesville, Va.

2:30 Discussion

3:00 Intermission to Visit Exhibits

3:30 Business Meeting

Kentucky Chapter, American College of Radiology
Room 208, Convention Center

2:00 "Brain and Lung Isotope Scanning"
David Preston, M.D., Lexington

2:30 "Calcification of the Vas Deferens"
James King, M.D., Lexington

3:00 Intermission to Visit Exhibits

3:30 "Plain Film Diagnosis of the Mediastinum"
Jerome F. Wiot, M.D., Cincinnati, Ohio

Kentucky Chapter, American College of Surgeons
Room 101, Convention Center

2:00 "Shock"
Robert J. Freeark, M.D., Chicago, Ill.

2:30 "Relation of Regional Enteritis and Ulcerative Colitis"
Coleman C. Johnston, M.D., Lexington

2:45 "Asymptomatic Recto-Sigmoidal Polyps"
William T. Rumage, M.D., Louisville
John E. Eckerle, M.D., Louisville
Herman Pocock, M.D., Louisville
Mr. Robert Merrill, Louisville

3:00 Intermission to Visit Exhibits

3:30 "Intra-arterial Chemotherapy for Cancer"
Blaine Lewis, M.D., Louisville
Malcolm Thompson, M.D., Louisville

3:50 "Routine Tube Pharyngostomy for Gastric Decompression"
John Ritter, M.D., Harlan

4:10 "Recent Advances in Pediatric Surgery"
Bernard Schoo, M.D., Louisville

FRIDAY, SEPTEMBER 27

Specialty Group Session

Kentucky Chapter, American College of Surgeons
Department of Surgery, University of Louisville

Fourth Floor Conference Room
Louisville General Hospital

8:00 "Operative Clinic" (Television)
James C. Drye, M.D.

9:00 "Surgery for Rheumatoid Arthritis" (Symposium)
James W. Harkness, M.B., Ch.B.
Harold Kleinert, M.D.
David Neustadt, M.D.

10:00 Coffee Break

10:15 "Acute Pancreatitis"
Norton Waterman, M.D.

10:30 "The Rejection Problem"
Allan M. Lansing, M.D.

10:45 "Zollinger-Ellison Syndrome—Recent Advances"
Fred T. Moore, M.D.

11:00 "Management of the Flail Chest"
Herbert T. Ransdell, M.D.

11:15 "Blood Viscosity and the Microcirculation"
M. Atik, M.D.

11:30 "Trauma to the Intestines"
E. Truman Mays, M.D.

11:45 "Foramen of Winslow Hernia"
John L. Cook, M.D.

12:00 "Retroperitoneal Fibrosis"
Phil Harbrecht, M.D.

12:30 Luncheon
"Medical School Plans"
Donn L. Smith, M.D., Dean, University of Louisville School of Medicine

2:00 Adjournment

Annual U of L Alumni Reunions Planned During KMA Meeting

Eight five-year classes of the University of Louisville School of Medicine plan alumni reunions in September during the KMA Annual Meeting, according to Les Shively of the Alumni Office.

In addition to a tour of the Medical School for all classes, each chairman is planning individual functions for his group. A list of the chairmen selected this year follows. All are located in Louisville.

1928—Pat R. Imes, M.D., 558 Medical Towers Bldg., 585-2189

1933—Naaman H. Burkhead, M.D., 700 Brown Bldg., 584-2421

1938—J. Thomas Giannini, M.D., 464 Medical Towers South Bldg., 583-2766

1943—Clarence E. Quaife, M.D., 2007 Bonnycastle Ave., 451-3948 and Blaine Lewis, M.D., 1711 Heyburn Bldg., 582-2023

1948—Laura V. Kimbrough, M.D., 4242 North Western Pkwy., 774-2412

1953—Lolita S. Weakley, M.D., 1416 Cherokee Rd., 451-1313

1958—Thomas E. Campbell, M.D., 704 Medical Towers Bldg., 587-8402

1963—Eugene H. Kremer III, M.D., 612 Medical Towers Bldg., 584-2257

Annual Meeting To Commemorate John G. Brooks, 1888 President

John Gaunt Brooks Memorial Meeting will be the official title of the 1968 KMA Annual Meeting in honor of the Association's 1888 President.



In 1935 the Association established the practice of honoring a past president or other outstanding physician at each Annual Meeting. In this tradition, Doctor Brooks' memory will be honored this year.

The program booklet for the Annual Meeting will contain a descriptive biography of Doctor Brooks, a Paducah physician, written by Eugene H. Conner, M.D., Louisville, KMA historian. The booklet will be available at the meeting, September 24, 25 and 26.

KMA Awards, Lt. Governor's Talk To Highlight President's Luncheon

The presentation of KMA's three top awards, a traditional Annual Meeting feature, and a talk by George Nigh, Lt. Governor of Oklahoma, will highlight the President's Luncheon September 25 in the Flag Room of the Kentucky Hotel.

The Distinguished Service Medal, the Outstanding General Practitioner Award and the R. Haynes Barr Award will be given at the luncheon, followed by Lt. Governor Nigh's talk on "It's A Fast, Fast World."

A well-known after dinner speaker, Lt. Gov. Nigh has earned the title of "Oklahoma's new Will Rogers" throughout the country where he has traveled extensively. Now serving his second term as Oklahoma's Lt. Governor, he also filled an unexpired term as that state's Governor and was a member of his state's House of Representatives for eight years. He is a teacher by profession.

The Awards Committee, chaired by Richard F. Grise, M.D., Bowling Green, selects the recipient of the R. Haynes Barr Award, given in recognition for outstanding contributions to medicine by a layman. Nominations for the other two awards, which are given to physicians, will be presented by the Committee to the House at its first session. Other nominations may be made from the floor. Nominations may be mailed now to KMA Headquarters Office.

Members of the Awards Committee are Doctor Grise, William A. Blodgett, M.D., Louisville; Frank L. Duncan, M.D., Monticello; C. Wayne Franz, M.D., Ashland; and Joseph Keith, Jr., M.D., Lexington.

Color TV, Panels To Headline Scientific Program of Meeting

Each of the four sessions of the scientific program for the Annual Meeting will feature a Color TV presentation and panel discussion by prominent guest speakers and KMA members, according to Peter P. Bosomworth, M.D., Lexington, chairman of the program committee.

Stimulating topics chosen for this year's discussion include "Respiratory Diseases," "Emergency Medical Care," "Office Examinations," and "Human Sexuality" and each session will deal with one of them. In addition, other talks have been scheduled to complement the presentations and to add variety to the program.

Guests of the 16 specialty groups appearing on the scientific programs will give individual presentations or participate in the panel discussions in connection with the Color TV programs. All of the speakers are well-known specialists in their respective fields and they will come to Kentucky from all parts of the country.

In addition to the scientific sessions, the Annual Meeting will include meetings of the 16 specialty groups, the President's Luncheon, an Orientation Program for new members, the Annual Convention of the Woman's Auxiliary and the annual KEMPAC Seminar. Seventy-six technical exhibits as well as a number of scientific exhibits will be on display throughout the three-day meeting for the benefit of the members.

KEMPAC Seminar Guest Speakers To Be Senatorial Candidates

The two candidates for U.S. senator from Kentucky, Miss Katherine Peden, Hopkinsville, the Democratic nominee, and Judge Marlow Cook, Louisville, the Republican nominee, will be the guest speakers at the annual KEMPAC Seminar preceding the KMA Annual Meeting.

John C. Quertermous, M.D., Murray, chairman of the KEMPAC Board, has announced that a reception, followed by a dinner and the Seminar, will begin at 6 p.m., Monday, September 23, in the Flag Room of the Kentucky Hotel.

Judge Cook and Miss Peden have been asked to discuss the ways in which members of the profession can participate effectively in political action, according to C. Kenneth Peters, M.D., Jeffersontown, KEMPAC secretary. Doctor Quertermous and Doctor Peters urge all KEMPAC members to attend this exciting and informative session.

From 1963 to 1967, Miss Peden served as Commissioner of Commerce in Kentucky. She was named by President Kennedy to the Commission on the Status of Women and by President Johnson to the National Advisory Commission on Civil Disorders.

Miss Peden is the owner and president of a Nicholasville radio station and in 1961 was elected president of the Federation of Business and Professional Women's Clubs. She was named Hopkinsville's "Woman of the Year" in 1952.



Miss Peden



Judge Cook

Judge Cook, elected in 1965 to his second term as Jefferson County Judge, served two terms as a member of the Kentucky House of Representatives. While holding that office he was vice chairman of the special committee investigating education in Kentucky and of the Legislative Research Commission planning and zoning committee.

A 1950 graduate of the University of Louisville Law School, Judge Cook has since been a practicing attorney in Kentucky. In 1961 he was named "Man of the Year" by the Louisville Junior Chamber of Commerce and "Outstanding Young Man of Kentucky" by the Kentucky Junior Chamber.

Scientific Exhibits To Display Recent Medical Advances

Nineteen outstanding scientific exhibits have been chosen to be on display during the KMA Annual Meeting, according to Thomas R. Marshall, M.D., Louisville, chairman of the Scientific Exhibits Committee.

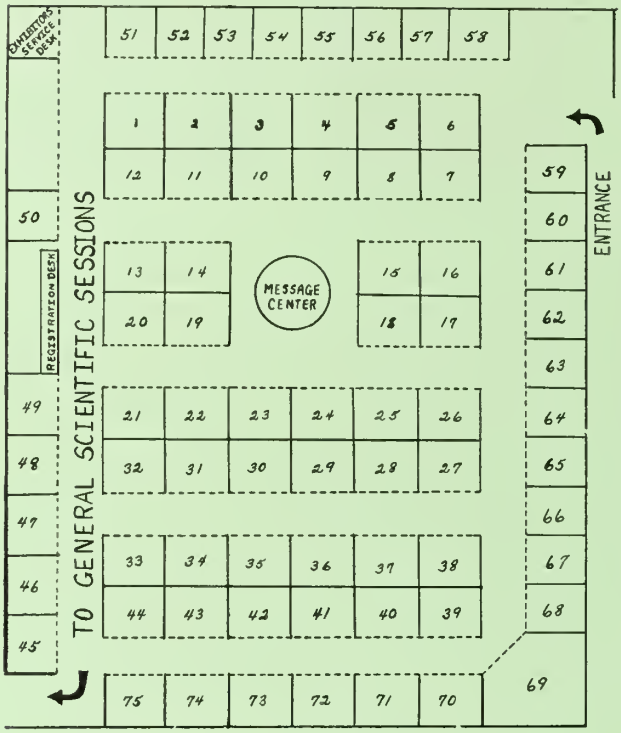
The exhibits will depict recent developments in research and techniques and will cover a wide variety of medical topics. The winning exhibitor will receive a plaque from KMA as well as the Aesculapius Award and a $200 check from Mead Johnson Laboratories. KMA will award a certificate to each participating exhibitor.

Conveniently arranged for easy access, the scientific exhibits will be located between the Technical Exhibit Hall and the Scientific Assembly Hall in Convention Center. A complete list of the scientific exhibits on display during the meeting will be carried in the KMA Program available at Convention Center.

Take This Issue Home To Your Wife

The special features of the Woman's Auxiliary program as well as the activities planned during the KMA Annual Meeting will be of interest to your wife. KMA President George F. Brockman, M.D., urges you to take this issue home for her to read.

Technical Exhibits To Feature Latest Developments In Medical Techniques and Information



You will be presented with a concise and composite picture of the latest developments in medical techniques and information when you enter the technical exhibit hall at Convention Center this year during the KMA Annual Meeting. Seventy-six exhibitors will be available to discuss with you the latest discoveries and innovations in their products or the most up-to-date advances in their services.

All exhibits have been prepared carefully and skillfully to appeal to you, the physician, and have been geared to your special interests as a practitioner. You will have a unique opportunity to secure a vast amount of knowledge and information conveniently and effortlessly in a short period of time.

In order to give every KMA member ample time to take advantage of this splendid opportunity, 30-minute intermissions for visiting the exhibits have been scheduled during each general and specialty group session.

TECHNICAL EXHIBITORS

Abbott Laboratories (20)
Arm Medical Consultants (3)
Arnar-Stone Laboratories, Inc. (2)
Ayerst Laboratories (70)

Blue Cross Hospital Plan, Inc. (40)
Barcherdt Campany (34)
Barden Campany, Pharmaceutical Div. (11)
Bristal Labaratories (72)
Burraughs Wel come & Co. (U.S.A.), Inc. (39)
Burton, Parsons & Company, Inc. (49)

Carnatian Company (54)
Central Dairy Council (65)
CIBA Pharmaceutical Company (12)
Caca Cala Company (69)
Capy Van of Louisville, Inc. (41)
Crocker-Fels Campany (46)

Dictaphane Corparation (37)
Dome Labaratories (75)

Eatan Labaratories (50)
Encyclopaedia Britannica, Inc. (64)

Field Enterprises Educational Carp. (5)

Geigy Pharmaceuticals (51)
Gerber Products Company (8)
Guild af Prescription Opticians af Ky. (9)

Hancack, John Life Insurance Ca. (68)
Haechst Pharmaceutical Campany (25)

Janrus Recarders Corparation (28)

Kay Surgical Incorparated (44)

Lederle Labaratories (14)
Lilly, Eli and Company (16)
Lippincatt, J.P. Company (4)
Larillard, P. Campany (50-A)
Lauisville Surgical Supply (47)

McNeil Laboratories, Inc. (10)
Mead Jahnsan Labaratories (33)
Medca-Siemens (22)
Medical Pratective Company (63)
Merck Sharp & Dahme (19)
Merrell, William S. Company (1)
Metrapalitan Life Insurance Co. (29)
Meyer Laboratories, Inc. (43)

Narth American Pharmacan (27)

Ortho Pharmaceutical Carp. (58)

Parke, Davis & Campany (18)
Pepsi-Cala Battler's Association (53)
Pfizer Labaratories (56)
Poythress, William P. Ca., Inc. (55)

Ransdell Surgical, Inc. (66)
Reynalds, R. J. Tabacca Ca. (36)
Rabins, A. H. Campany (57)
Roche Labaratories (48)
Raerig, J. B. Division (62)
Rarer, William H. Inc. (73)
Rass Laboratories (17)

Sandaz Pharmaceuticals (60)
Saunders, W. B. Company (31)
Schering Labaratories (23)
Searle, G. D. & Campany (59)
Smith Kline and French Labs. (21)
Smith, Miller & Patch, Inc. (15)
Spalding Linen Service (67)
Squibb, E. R. & Sons (26)
Stein Bras. & Boyce, Inc. (71)
Stuart Divisian, Atlas Chemical Industries, Inc. (13)
Syntex Labaratories, Inc. (52)

Tele-Business Products Campany (74)
3M Business Products Sales, Inc. (38)

Unian Carbide Corp., Linde Division (42)
USV Pharmaceutical Carparatian (6)

Warner-Chilcatt Laboratories (7)
Warren-Teed Pharmaceuticals, Inc. (35)
Westwaod Pharmaceuticals (45)
Winthrop Labaratories (32)
Wacher, Max & Son Campany (24)
Wyeth Labaratories (30)

Zimmer Manufacturing Company (61)

PROGRAM
FORTY-SIXTH ANNUAL CONVENTION
Of The
WOMAN'S AUXILIARY
To The
KENTUCKY MEDICAL ASSOCIATION

SEPTEMBER 23-24-25

1968

KENTUCKY HOTEL **LOUISVILLE, KENTUCKY**

General Information

REGISTRATION

Lobby, Kentucky Hotel

Monday	12 Noon-5:00 PM
Tuesday	7:30 AM- 5.00 PM
Wednesday	9:00 AM-11:00 AM

PRE-CONVENTION
GENERAL WORKSHOP
"Auxiliary Happenings"

MIRROR ROOM, MONDAY,
SEPTEMBER 23, 2-4 PM

Mrs. Hoyt D. Gardner, Chairman, assisted by Mrs. J. Murray Kinsman and Mrs. David B. Stevens.

TUESDAY, SEPTEMBER 24

8:00 AM

Pre-convention Board Breakfast (subscription), Parlor B, Kentucky Hotel. All general officers, chairmen of standing and special committees, three immediate past presidents, councilors, co-ordinator for members-at-large and the county presidents are urged to attend.

COFFEE MEZZANINE 8-10 AM

10:00 AM
MIRROR ROOM

Formal opening of the 46th Annual Convention of the Woman's Auxiliary to the Kentucky Medical Association.

Mrs. Charles C. Kissinger, President, presiding

Invocation .....Mrs. Edwin T. Davis, Paducah, Chaplain

Pledge of Allegiance to the Flag
Mrs. Robert C. Tate, Louisville

Pledge of Loyalty .....Mrs. J. Murray Kinsman, Louisville
National Director, Auxiliary to AMA

Address of Welcome Mrs. Kenneth Hodge, Louisville
President, Jefferson County

Presentation of Distinguished Guests
Mrs. Charles C. Kissinger, Henderson

Adoption of Convention Rules
Mrs. R. Haynes Barr, Owensboro, Parliamentarian

Announcements .....Mrs. George W. Schafer, Louisville, Convention Chairman

Roll Call of Delegates

Minutes of 45th Annual Meeting
Mrs. C. E. Hornaday, Owensboro
Recording Secretary

Report of the 1968 National Convention
Mrs. Leonard E. Wallace, Lexington

Greetings .....Mrs. Karl Klein, Lexington
WA-SAMA, University of Kentucky

Greetings .....Mrs. J. Thomas Giannini, Louisville
WA-SAMA, University of Louisville

Greetings .....Mrs. Louise H. Griffin, President, Woman's Auxiliary to the Southern Medical Association

Report of the Councilor of the Woman's Auxiliary to the Southern Medical Association
Mrs. J. Jack Martin, Tompkinsville

President's Report .....Mrs. Charles C. Kissinger

Report of Officers

President-Elect .....Mrs. William H. McBeath, Lexington

Vice-Presidents ....Mrs. F. H. Hodges, Pikeville
Mrs. James A. Harris, Paducah
Mrs. O. J. Stein, Somerset
Mrs. Joseph B. Parker, Lexington

Treasurer .....Mrs. Bernard Schoo, Louisville

Corresponding Secretary .....Mrs. W. B. Blue, Henderson

Report of Councilors

Report of State Chairmen

Unfinished Business

New Business
Amendments .....Mrs. R. Haynes Barr, Parliamentarian

Report of the Nominating Committee

Presentation of the 1968-1969 Budget
Mrs. William C. Durham, Louisville

Election of the 1968-1969 Nominating Committee

Report of Registration .....Mrs. Roger Queens, Louisville

In Memoriam Service .....Mrs. Edwin T. Davis, Chaplain

Participants .....Mrs. H. L. Bushey, Barbourville
Mrs. Robert D. Peterson, Fulton
Mrs. Kenneth Hodge, Louisville
Mrs. Charles C. Kissinger, Henderson

LUNCHEON

1:00 PM

TERRACE ROOM

Honoring

Past Presidents, Members-at-Large, Distinguished Guests

Invocation .....Mrs. O. J. Stein, Somerset

Skit .....Mrs. Peter Bosomworth, Lexington Legislative Chairman

Guest Speaker .Mrs. John M. Chenault, Decator, Ala. National President-Elect

WEDNESDAY, SEPTEMBER 25

ROLLS and COFFEE ..... Mezzanine 8-9 AM
Exhibits and Hobby Show on Display

9:00 AM
MIRROR ROOM

Invocation ....Mrs. Leonard E. Wallace, Lexington

Roll Call

Reading of Minutes .....Mrs. C. E. Hornaday

Presentation of Distinguished Guests

Announcements

Presentation of Community Service Award

County Presidents' Reports

Election of Officers

Installation of Officers ....Mrs. John M. Chenault National President-Elect

Presentation of Gavel and Pin
Mrs. Charles C. Kissinger

Inaugural Address .....Mrs. William H. McBeath

Presentation of Past President's Pin
Mrs. Earl W. Roles, Louisville

Greetings ..George F. Brockman, M.D., Greenville KMA President

Courtesy Resolution ..Mrs. John Harter, Louisville

LUNCHEON

11:50 AM

FLAG ROOM

President's Luncheon with Doctors

WEDNESDAY AFTERNOON

2:00-4:00 PM

MIRROR ROOM

Post-Convention Board Meeting

Presiding .....Mrs. William H. McBeath

Invocation .....Mrs. William Willard, Lexington

Meeting of Membership Committee

1968 State Convention Committees

General Chairman .....Mrs. George W. Schafer, Louisville

Co-Chairman ..Mrs. Charles P. Davis, Louisville

Registration .....Mrs. Roger Queens, Louisville

Hospitality ....Mrs. William C. Edwards, Louisville

Finance .....Mrs. William C. Durham, Louisville

Tuesday Pre-Convention Breakfast & Tuesday Luncheon .....Mrs. Wm. F. Hawn, Louisville

Publicity .....Mrs. Daniel W. Burke, Louisville

Hobby Show .....Mrs. John W. Miller, Louisville

Exhibits .....Mrs. John J. Ryan, Louisville

Official Hostesses .....Mrs. S. Randolph Scheen, Louisville
Mrs. Robert C. Tate, Louisville
Mrs. James R. Barnes, Louisville
Mrs. Parnell Rollings, Louisville
Mrs. Harold F. Funke, Pewee Valley
Mrs. Robert R. O'Connor, Louisville
Mrs. Roy A. Martin, Louisville

Tellers .....Mrs. George F. Brockman, Greenville
Mrs. Gaynor Howell, Henderson
Mrs. Keith Ellis, Benton

Pages .....Mrs. B. V. Cymbala, Henderson
Mrs. John W. McClellen, Henderson
Mrs. Coy E. Ball, Owensboro

Timekeepers .....Mrs. Bernard Asman, Louisville
Mrs. Carlisle Morse, Louisville
Mrs. William Wainer, Providence

In peptic ulcer: the antacid puzzle



solved by Mylanta®

aluminum and magnesium hydroxides *plus* simethicone

"will it ease the pain?"

Mylanta helps relieve ulcer pain with the two most widely prescribed antacids: aluminum and magnesium hydroxides.

will it help "my gassy stomach"?

Mylanta *also* contains simethicone: for concomitant relief of G.I. gas distress.

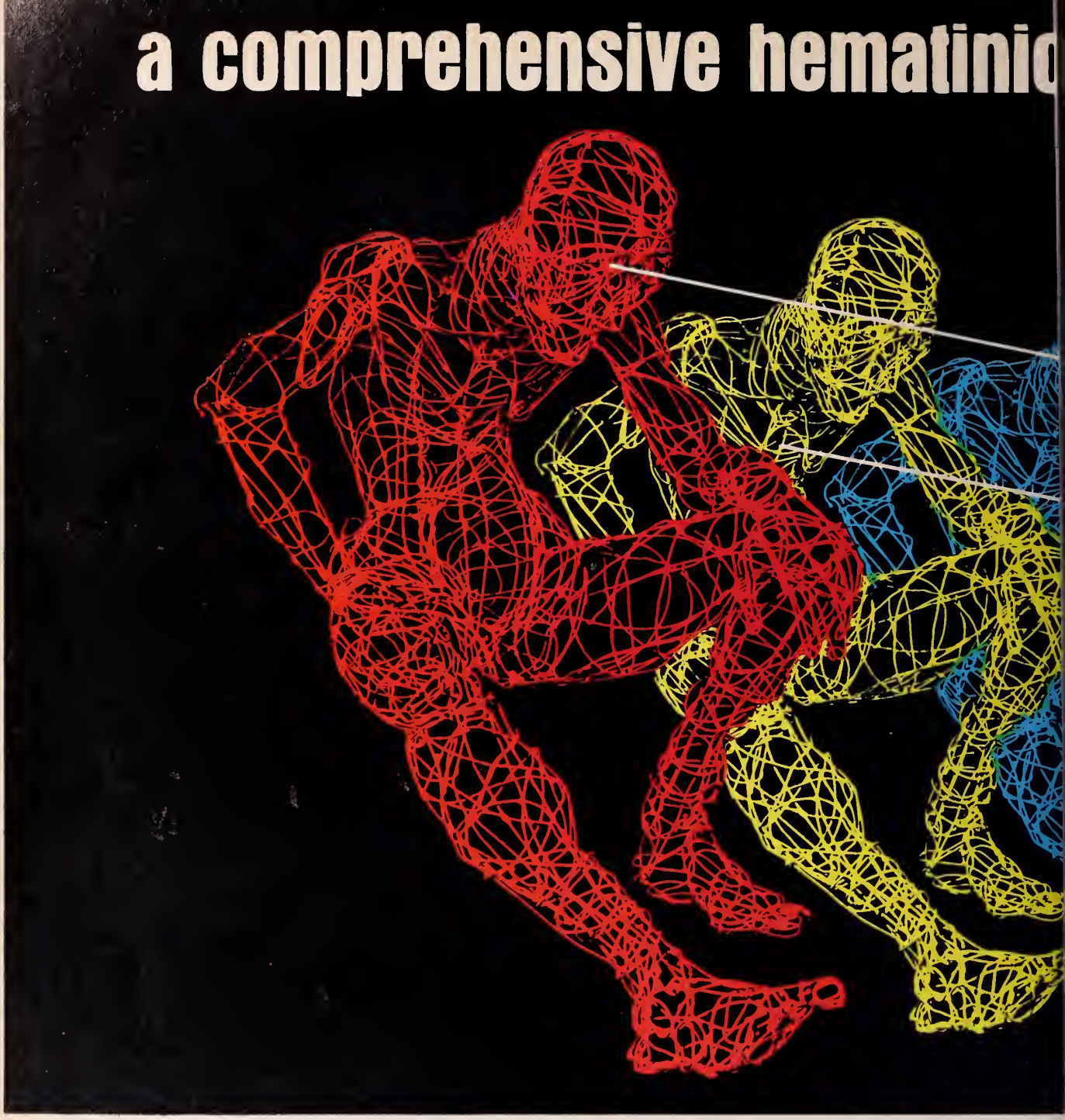
"will this one taste O.K.?"

The *prolonged* acceptance of Mylanta was recently confirmed in 87.5% of 104 patients—after a total of 20,459 documented days of therapy.* *Danhof, I. E.: Report on file.

Composition: Each Mylanta chewable tablet or teaspoonful (5 ml.) contains: magnesium hydroxide, 200 mg.; aluminum hydroxide, dried gel, 200 mg.; simethicone, 20 mg. *Dosage:* One or two tablets (well chewed or allowed to dissolve in the mouth) or one or two teaspoonfuls to be taken between meals and at bedtime.

Stuart Division/Pasadena, Calif.
ATLAS CHEMICAL INDUSTRIES, INC.

a comprehensive hematinic



Description: Each Pulvule® contains—

Special Liver-Stomach Concentrate, Lilly (containing Intrinsic Factor)	150	mg.
Cobalamin Concentrate, N.F., equivalent to Cobalamin (The total vitamin B_{12} activity in the Special Liver-Stomach Concentrate, Lilly, and the Cobalamin Concentrate, N.F., is 15 micrograms.)	7.5	mcg.
Iron, Elemental (as Ferrous Fumarate)	110	mg.
Ascorbic Acid (Vitamin C)	75	mg.
Folic Acid	1	mg.

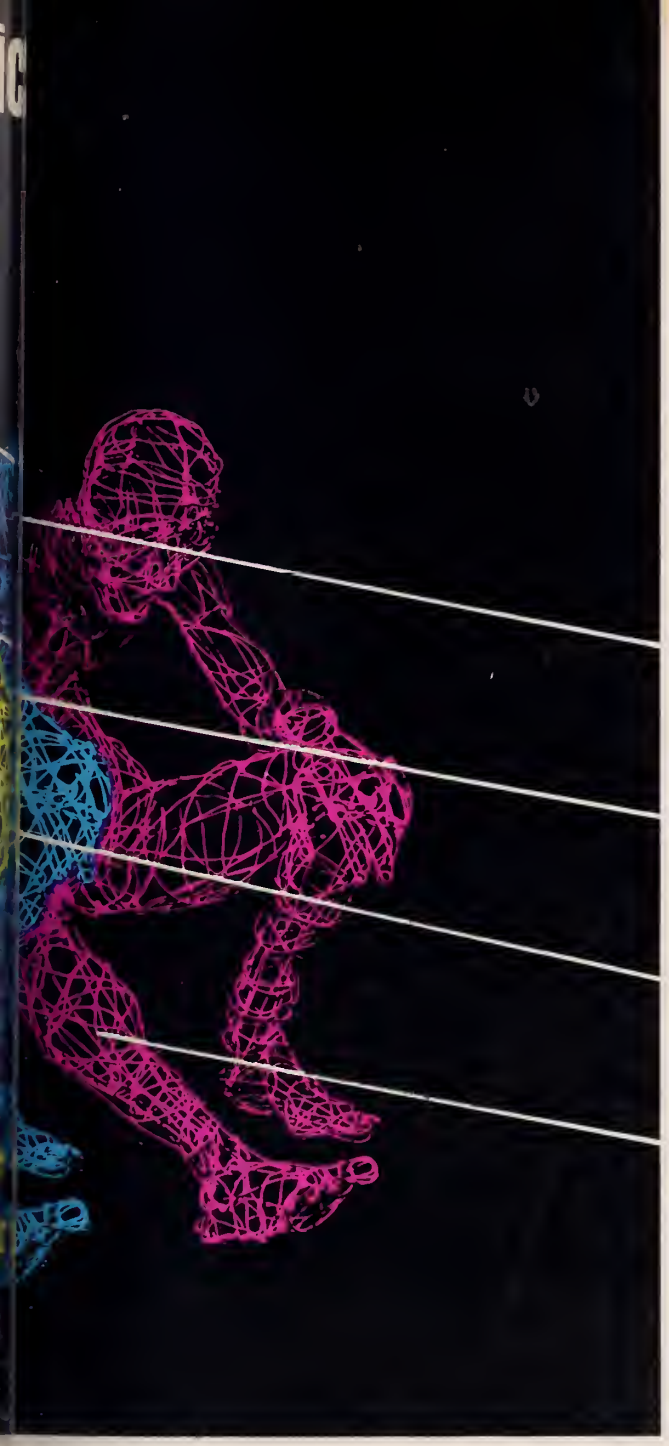
Indications: Trinsicon® (hematinic concentrate with intrinsic factor, Lilly) is a multifactor preparation effective in the treatment of anemias that respond to oral hematinics, including pernicious anemia and other megaloblastic anemias and also iron-deficiency anemia.

Contraindications: Hemochromatosis and hemosiderosis.

Precautions: Anemia is a manifestation that requires appropriate investigation to determine its cause or causes.

In pernicious anemia, the use of folic acid without adequate vitamin B_{12} therapy may result in hematologic remission but neurological progression. Adequate doses of vitamin B_{12} (parenteral or oral with potent intrinsic factor as in Trinsicon® [hematinic concentrate with intrinsic factor, Lilly]) usually prevent, halt or improve the neurological changes.

As with all preparations containing intrinsic factor, resistance may develop in some cases of pernicious anemia to the potentiation of absorption of physiological doses of vitamin B_{12}. If resistance occurs, parenteral therapy, or oral therapy with so-called massive doses of vitamin B_{12}, may be necessary. No single regimen fits all cases, and the status of the patient observed in follow-up is the final criterion for adequacy of therapy. Per



You can treat combined deficiencies with

Trinsicon®

—the multifactor hematinic

Vitamin B_{12} plus intrinsic factor (15 mcg. B_{12} activity)—helps provide adequate levels of this important vitamin.

Folic acid (1 mg.)—treats nutritional macrocytic anemias and/or malabsorption syndromes.

Ascorbic acid (75 mg.)—augments the conversion of folic acid to its active form and helps iron absorption.

Iron (110 mg.)—treats hypochromic anemia.

inical and laboratory studies are considered essential and are ecommended.

dverse Reactions: In rare instances, iron in therapeutic doses roduces gastro-intestinal reactions, such as diarrhea or consti- ation. Reducing the dose and administering it with meals will inimize these effects.

In extremely rare instances, skin rash suggesting allergy has llowed oral administration of liver-stomach material. Instances f apparent allergic sensitization have also been reported after ral administration of folic acid.

osage: One Pulvule twice a day. (Two Pulvules daily produce a tandard response in the average uncomplicated case of perni- ous anemia.)

ow Supplied: Pulvules Trinsicon® (hematinic concentrate with trinsic factor, Lilly), in bottles of 60 and 500. [032568]

Additional information available to physicians upon request.

Eli Lilly and Company, Indianapolis, Indiana 46206.

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choose an experienced candidate—
millions of doses prescribed

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(diphenhydramine hydrochloride)

The White band on Pink capsule combination is a registered trademark of Parke, Davis & Company.

Supplied in various dosage forms including Kapseals,® containing 50 mg. of diphenhydramine hydrochloride.

Parke, Davis & Company, Detroit, Michigan 48232

PARKE-DAVIS

ORGANIZATION SECTION

AMA Names N.Y. Physician President-Elect in June

In a unamimous vote of the House of Delegates, Gerald D. Dorman, M.D., a New York City practitioner of industrial medicine, was named president-elect of the American Medical Association June 20 during the Annual Meeting in San Francisco. Dwight L. Wilbur, M.D., San Francisco, was installed as the AMA's 123rd president during the meeting.



Doctor Dorman

A 1929 graduate of Columbia University Medical School, Doctor Dorman was engaged in private practice as a surgeon from 1932 to 1942. He entered the Army as a field surgeon during World War II and retired from the Army Reserve with the rank of colonel in 1963.

From 1945 to 1947, Doctor Dorman was assistant medical director for New York Life Insurance Company and medical director from 1947 to 1960. He served as second vice president and medical consultant from 1961 until his retirement in July of this year.

Doctor Dorman has served the AMA as a member of the Board of Trustees since 1960 and as secretary-treasurer in 1966. Before his election to the Board he was a delegate from the New York Medical Society for six years. He has also served as chairman of the AMA Committee on Workmen's Compensation and as a member of other AMA committees.

A past president of the Medical Society of the County of New York, he has held offices in his state medical society and he is a member of many professional organizations.

Fourth Oral Cancer Symposium On Diagnosis To Be Sept. 14

"Methods and Problems in Diagnosis" will be the title of the Fourth Oral Cancer Symposium beginning at 8:30 a.m., September 14 in Louisville General Hospital's Rankin Amphitheatre, according to Condict Moore, M.D., director of the Oral Cancer Diagnostic Program.

The department of surgery of the University of Louisville School of Medicine will present the symposium in cooperation with the School of Dentistry. The Oral Cancer Diagnostic Program is supported by the Cancer Control Branch of the U.S. Public Health Service.

The course will be acceptable for three hours of credit by the American Academy of General Practice. A list of the speakers and their topics follows:

"Needs of Oral Pathologist in Diagnosis of Cancer"
Nathaniel Rowe, D.D.S., M.D.S., St. Louis, Mo.

"Methods of Oral Diagnosis"
Robert Walker, D.D.S., M.D., Dallas, Tex.

"Do's and Don't in Diagnosing Soft Tissue Lesions of the Mouth"
Robert Hutter, M.D., New York, N.Y.

"The Uses of Oral Cytology Today"
James Parker, M.D., Louisville

"The Role of the Practicing Dentist in Oral Diagnosis"
Duncan King, D.M.D., Louisville



C. Hunter Green, Louisville, (left) vice president of South Central Bell Telephone Company (formerly Southern Bell) accepts the Twelfth KMA Automotive Safety Award presented to the company in June. With Mr. Green is William T. Rumage, Jr., M.D., Louisville, chairman of the KMA and AMA Disaster Medical Care Committees. Given only to organizations with seat belts installed in 100 percent of the vehicles operated by their memberships, the Tenth and Eleventh Awards recently went to the Louisville Division of Police and the Louisville Post Office, respectively.

Kentucky Represented by 90 Physicians at Annual AMA Convention

Ninety Kentucky physicians attended the 117th Annual Convention of the American Medical Association June 16-20 in San Francisco, according to the list received by KMA from the AMA's Physicians' Records Section Control Unit.

All of KMA's delegates and alternate delegates to the AMA House attended the sessions. The delegation, led by senior delegate J. Thomas Giannini, M.D., Louisville, included John C. Quertermous, M.D., Murray, Charles C. Rutledge, M.D., Hazard, and alternates Charles G. Bryant, M.D., Louisville, Daryl P. Harvey, M.D., Glasgow, and David B. Stevens, M.D., Lexington.

KMA officers attending the convention included President George F. Brockman, M. D., Greenville, President-Elect Henry B. Asman, M.D., Louisville, and Keith P. Smith, M.D., Corbin, treasurer.

A complete list of those Kentucky physicians registered at the Convention follows.

LOUISVILLE

William H. Anderson, M.D.
Henry B. Asman, M.D.
Charles G. Bryant, M.D.
David M. Cox, M.D.
Elbert L. Dennis, M.D.
Hoyt D. Gardner, M.D.
J. Thomas Giannini, M.D.
Samuel S. Gordon, M.D.
Harold Graves, M.D.
J. C. Hill, M.D.
James T. Linville, M.D.
Robert C. Long, M.D.
Robert W. Lykins, M.D.
John W. Miller, M.D.
Charles W. Morris, M.D.
Maurice Nataro, M.D.
H. Oppenheim, M.D.
James E. Parker, M.D.
Irving B. Perlstein, M.D.
John A. Petry, M D.
N. A. Saliba, M.D.
Heshmatoliah Shahriaree, M.D.
Thomas Stephenson, M.D.
Juan Tan, M.D.
John D. Winebrenner, M.D.
Carroll L. Witten, M.D.

LEXINGTON

M. Abdulian, M.D.
Peter P. Bosomworth, M.D.
Richard D. Floyd, M.D.
Donald I. George, M.D.
George Gumbert, Jr., M.D.
Joseph Hamburg, M.D.
Michael Hamilton, M.D.
Thomas G. Hobbs, M.D.
V. A. Jackson, M.D.
Irving F. Kanner, M.D.
Maurice Kaufmann, M.D.
William G. Malette, M.D.
L. D. Mayer, M.D.
William H. McBeath, M.D.
William E. McDaniel, M.D.
T. R. Miller, M.D.
James J. Rams, M D.
James S. Rich, M.D.
Carl H. Scott, M.D.
David W. Scott, M.D.
David B. Stevens, M.D.
Paul Titus, M.D.
John E. Trevey, M.D.
L. E. Wallace, M.D.
Tom F. Whayne, M.D.
Carl Wiesel, M.D.
Jonathan D. Wirtschafter, M.D.

OTHER CITIES

Charles E. Bellingham, M.D., Ft. Campbell
Irvin Bensman, M.D., Owensboro
R. Bailey Binford, M.D., Russell Springs
C. M. Blanton, M.D., Paducah
George F. Brockman, M.D., Greenville
Harold L. Bushey, M.D., Barbourville
Ralph L. Cash, M.D., Princeton
Caleb H. Y. Chu, M.D., Oneida
Royce E. Dawson, M.D., Owensboro
Alfredo V. Echiverri, M.D., Paris
James A. Freeman, Jr., M.D., Dawson Springs
William Goldsmith, M.D., Ft. Knox
James C. Hart, M.D., Murray
Daryl P. Harvey, M.D., Glasgow
A. H. Hopwood, M.D., Owensboro
Charles E. Hornaday, M.D., Owensboro
William D. Inglis, M.D., Ft. Knox
Harold S. Kaplan, M.D., Ft. Knox
Charles C. Kissinger, M.D., Henderson
Max D. Klein, M.D., Shelbyville
Paul F. Maddox, M.D., Campton
Arthur J. Nash, M.D., Jenkins
Earl P. Oliver, M.D., Scottsville
William E. Pearson, M.D., Owensboro
P. A. Pichardo, M.D., Glasgow
F. M. Picklesimer, M.D., Paintsville
John C. Quertermous, M.D., Murray
Howard Ravenscraft, M.D., Hebron
John A. Reeves, M.D , Covington
Charles C. Rutledge, M.D., Hazard
Otto Salsbery, M.D., Covington
Robert J. Salisbury, M.D., Mt. Sterling
Frank K. Sewell, M.D., Mt. Sterling
Charles E. Shields, M.D., Ft. Knox
Keith P. Smith, M.D., Corbin
Eugene L. Snyder, M.D., Ft. Knox
William W. Wainer, M.D., Providence

Two Special Committees Announced For Ky. Chapter, ACS Meeting

J. Duffy Hancock, M.D., Louisville, president of the Kentucky Chapter, American College of Surgeons, recently announced the surgeons appointed to the Luncheon and Reception Committees for the Chapter's September meeting planned in connection with the KMA Annual Session.

Members of the Luncheon Committee include Charles Bisig, M.D., chairman, Clarence Claugus, M.D., Philip Harbrecht, M.D., David Kinnaird, M D., Robert W. Robertson, M.D., Robert Tate, M.D., Edward Warrick, M.D. and Norton Waterman, M.D.

The Reception Committee members will be Roy Moore, M.D., chairman, John T. Bate, M.D., R. Arnold Griswold, M.D., Walter I. Hume, Jr., M.D., Rudolf J. Noer, M.D. and George Sehlinger, M.D.

All are from Louisville except Doctor Robertson who is from Paducah.

UK To Hold Seminar on Cancer

A seminar entitled "Management of Lumps and Bumps" will be presented September 13 and 14 by the University of Kentucky College of Medicine in cooperation with the Kentucky Division, American Cancer Society. The seminar will be held at the University of Kentucky Medical Center.

The primary topic of the two-day session will be the recognition and management of early and premalignant lesions in the skin, breast, oral cavity and in children.

Wayne W. Peternel, M.D., a gastroenterologist, recently became an assistant professor of medicine in the University of Kentucky College of Medicine, Lexington. Doctor Peternel graduated from the University of Pittsburgh in 1959 and completed his internship and residency training at Cincinnati General Hospital. He was formerly chief of gastroenterology at the VA Hospital in Pittsburgh.

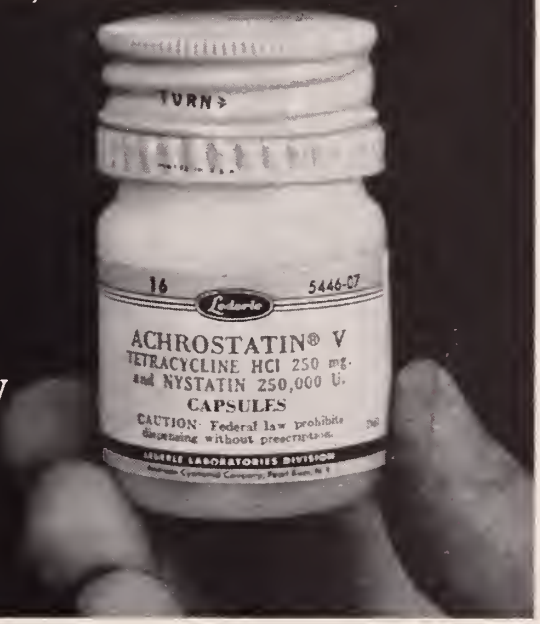
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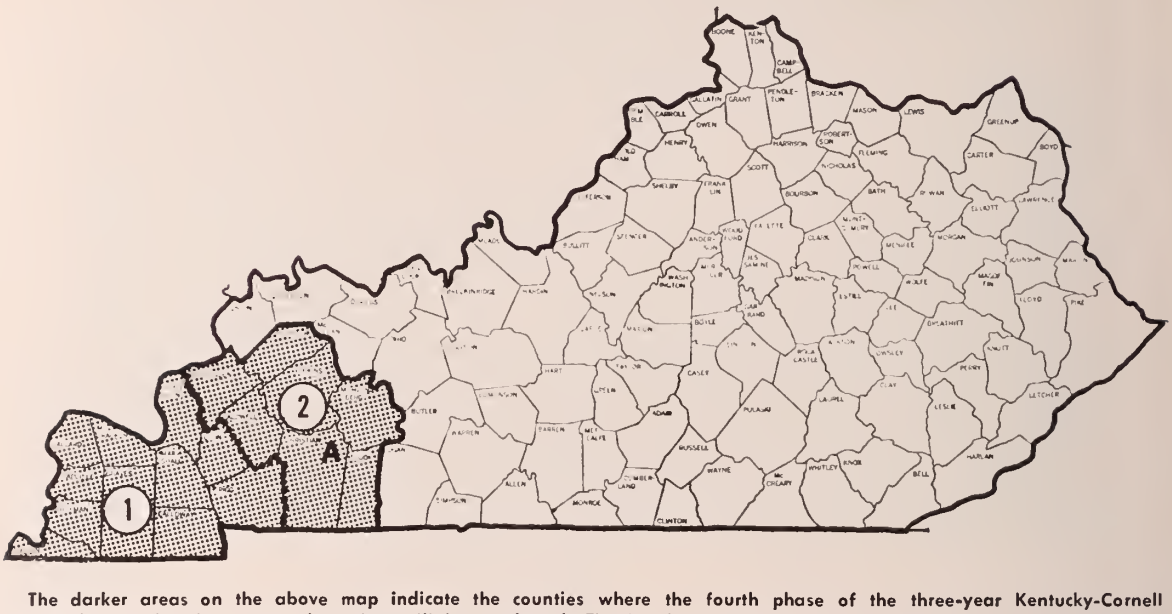


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Kentucky-Cornell Automotive Crash Injury Research



The darker areas on the above map indicate the counties where the fourth phase of the three-year Kentucky-Cornell Automotive Crash Injury Research project will be conducted. The fourth sampling period began August 1 and will continue for six months.

Auto Safety Research Program Begins Fourth Study Phase

The fourth phase of the second three-year research study with the goal of making automobiles safer began August 1 in Kentucky. The primary topic of the current study includes the nature and specific causes of injuries sustained by occupants of recent model passenger cars in rural area accidents.

KMA, the Kentucky State Department of Health, the Kentucky Hospital Association and the Kentucky State Police are sponsoring the program in cooperation with Cornell University. The counties included in the fourth six-month phase of the program are Ballard, Caldwell, Calloway, Carlisle, Christian, Crittenden, Fulton, Graves, Hickman, Hopkins, Livingston, Lyon, Marshall, McCracken, Muhlenberg, Todd, Trigg and Webster.

You may be asked to participate in the data collection project if you are a physician in one of these counties. Whenever an occupant of a passenger car of the last three-year model is injured or killed, a state police officer will provide you with a special report form for recording injury information.

William Keller, M.D., Louisville, KMA Highway Safety Chairman, urges your cooperation through this research program to reduce deaths and injuries in future auto accidents.

AMA-WA Re-elects Mrs. Martin

Mrs. J. Jack Martin, Tompkinsville, was named to a second term as chairman of the International Health Activities Committee of the AMA Woman's Auxiliary during the organization's 45th Annual Convention June 16-19 in San Francisco.

A former president of the Woman's Auxiliary to KMA, Mrs. Martin is now the Councilor for Kentucky of the Woman's Auxiliary to the Southern Medical Association.

NCDC Offers Program Planning Aid

The National Communicable Disease Center will provide assistance in designing educational programs on infectious diseases for meetings of medical organizations at minimum or no expense. A program can be tailored to fit the particular needs of any group.

Interested parties may contact R. Burt Prater, Jr., M.D., Acting Chief, Seminar Services Unit, National Communicable Disease Center, Atlanta, Ga. 30333.

Staff Physicians - 2400 bed psychiatric hospital with residency training program in psychiatry. Three vacancies on alcoholic, geriatric, or psychiatric services. Salary $12,000 - $21,000. 40 hour week, 10 days sick leave, 3 weeks vacation, and retirement program. Contact R.L. Rollins, Jr., M.D. Dorothea Dix Hospital, Raleigh, N. C. 27602

Orientation Course Attendance Reported for Sixth Session

N. L. Bosworth, M.D., chairman of the KMA Committee on Communication and Health Education, recently reported that 28 physicians attended the Sixth Orientation Program for new members on April 17 during the KMA Interim Meeting.

The next Orientation Session is scheduled to begin at 8:30 a.m., Monday, September 23 in the Mirror Room of the Kentucky Hotel, just prior to the opening of the KMA Annual Meeting. See the Annual Meeting Section of this issue for Orientation Program details.

Listed below are the names of the physicians who attended the April 17, 1968 program. If you were in attendance for this session and your name has been inadvertently omitted, it is requested that you advise the KMA Headquarters Office.

Joseph R. Bowling, M.D.
T. R. Brandstetter, M.D.
Leroy S. Buck, M.D.
D. H. Donahoe, M.D.
E. S. Downs, M.D.
T A. Garcis, M.D.
Ronald M. Garvin, M.D.
Robert F. Gloor, M.D.
William P. Glover, M.D.
Violetta Hayden, M.D.
M. G. Howell, M.D.
William S. Jordan, M.D.
Everett L. Kalb, M.D.
John M. Karibo, M.D.
Richard F. Keller, M.D.
B. P. Komasa, M.D.
James G. Kuhns, M.D.
Wayne C. Liles, M.D.
Walter A. Mitchell, M.D.
P. A. Pichardo, M.D.
John A. Reeves, M.D.
George A. Renaker, M.D.
N. Alex Saliba, M.D.
Stephen C. Schindler, M.D.
Robert P. Smith, M.D.
John E. Trevey, M.D.
William M. Townsend, M.D.
George Zarocostas, M.D.

KMA Committee Reports

Coordinating Commission on Governmental Medical Services

Paul J. Parks, M.D., Bowling Green, chairman

KMA Headquarters Office **June 6, 1968**

The Coordinating Commission on Governmental Medical Services held its second meeting of the Associational year on June 6, 1968, at which time progress reports were heard on the Ohio Valley Regional Medical Program, the new VA Home Town Letter of Agreement, Comprehensive Health Planning legislation as it would apply to Kentucky, Appalachian and OEO Programs in Kentucky, and reports by the chairmen of both the Title XVIII and Title XIX Programs.

Advisory Committee on Title XVIII

Paul J. Parks, M.D., Bowling Green, chairman

KMA Headquarters Office **June 6, 1968**

This committee met on June 6, 1968, to review a number of cases that had been referred to it on the subject of custodial care versus medical care. Representatives of the Blue Cross Hospital Plan and the Metropolitan Life Insurance Company were in attendance at this meeting.



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In Memoriam

EVERETT D. BLAIR, M.D.

Morehead

1905-1968

Everett D. Blair, M.D., 62, a general practitioner, died July 14 at St. Claire Medical Center in Morehead. A 1932 graduate of the University of Michigan Medical School, Doctor Blair had practiced in Morehead since 1935. He was a member of the St. Claire Medical Center staff and past president of the Rowan County Medical Society.

JOHN L. CLAY, M.D.

Morehead

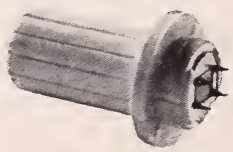
1906-1968

John L. Clay, M.D., 62, a Morehead physician for 11 years, died June 25 at his home. Death was attributed to a heart attack. Doctor Clay graduated from Tufts University School of Medicine in 1933. He had practiced also in Perryville, Salt Lick and in Seth, West Va.

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BENJAMIN F. ROBINSON, M.D.

Lexington

1881-1968

Benjamin F. Robinson, M.D., 86, a retired Lexington physician, died June 26 at Central Baptist Hospital. Doctor Robinson graduated from the University of Louisville School of Medicine in 1909. He was a fellow of the American College of Surgeons.

ROY SANDERS, M.D.

Dorton

1895-1968

Roy Sanders, M.D., 73, a Dorton general practitioner for 40 years, died July 1 at the Pikeville Methodist Hospital following a short illness. Doctor Sanders graduated from the Kansas City Medical College in 1928. He served two terms in the state legislature as a representative from Pike County's 93rd District. He was a member of the Southern Medical Association.

LOGAN M. WEAVER, M.D.

Bowling Green

1883-1968

Logan M. Weaver, M.D., 85, a retired physician, died July 3 at City-County Hospital. Doctor Weaver graduated from the University of Louisville School of Medicine in 1910. After his retirement as a colonel from the U.S. Army, he served as a public health officer in McCracken and Henderson Counties.

R. H. WILBER, M.D.

Formerly of Lebanon

1902-1968

R. H. Wilber, M.D., 66, a former Lebanon surgeon, died May 29 at Mary Immaculate Hospital. Doctor Wilber, a 1928 graduate of the University of Louisville School of Medicine, had lived in DeLand, Fla., since 1950.

NEWS ITEMS

Cyrus M. Day, M.D., a general practitioner, has opened an office in Louisville. Doctor Day graduated from the University of Louisville School of Medicine in 1966 and completed his internship at Louisville General Hospital.

James B. Miller, M.D., a general practitioner, is now associated with the Daniel Boone Clinic, Harlan. Doctor Miller, whose subspecialty is ophthalmology, graduated from the University of Tennessee Medical School in 1932.

Jeffries L. Blackerby, M.D. is now practicing in association with Keith M. Coverdale, M.D., in Bowling Green, limiting his practice to pediatrics. Doctor Blackerby graduated from the University of Louisville School of Medicine in 1957. He completed his internship at St. Louis City Hospital and his residency training at Louisville Children's Hospital. He practiced previously in Lexington.

William A. Hammill, M.D., a specialist in internal medicine and cardiology, recently became a full-time faculty member of the University of Kentucky College of Medicine. Doctor Hammill graduated from Ohio State University Medical School in 1963. He interned at the University of Florida and completed his residency training at Ohio State in 1967.

Violetta Hayden, M.D., a pediatrician, is practicing in association with her husband, R. E. Hayden, M.D., in Barbourville. Doctor Hayden graduated from the University of Milan, Italy, in 1956. She completed her internship at Columbus Hospital and her residency training at Cook County Children's Hospital, Chicago.

Gordon Hollins, M.D., a pediatrician, is associated with Doane Fischer, M.D., at the Daniel Boone Clinic in Harlan. Doctor Hollins graduated from Vanderbilt University Medical School in 1959. He interned at Vanderbilt and received part of his residency training there, completing his residency at Baptist Hospital in North Carolina. Doctor Hollins has practiced in Norfolk, Nebraska.

Elton R. House, M.D., a general practitioner, has opened an office in Henderson where he recently returned from military service. Doctor House graduated from Howard University Medical School, Washington, D.C., in 1961. He practiced previously in Henderson from 1963 to 1966 when he entered the U.S. Army.

J. E. Johnson Jr., M.D. is now associated with International Business Machines in Lexington, limiting his practice to industrial medicine. Doctor Johnson previously practiced in Madisonville and in Millersburg.

Joanna C. Maiden, M.D., a general practitioner, is now with the Floyd Comprehensive Health Services Program in Prestonsburg. Doctor Maiden, a 1955 graduate of Woman's Medical College of Pennsylvania, served as a medical missionary in Nigeria from 1958 to 1966.

Jerry W. Martin, M.D., a general practitioner, has located in Bowling Green. Doctor Martin graduated from the University of Louisville School of Medicine in 1963 and interned at Louisville General Hospital. He had practiced two years in Bowling Green before serving two years in the U.S. Army.

Jesse H. Meredith, M.D., a general practitioner, is associated with the Howard Clinic in Glasgow. Doctor Meredith graduated from the University of Louisville School of Medicine in 1966 and completed his internship at St. Mary's Hospital, West Palm Beach, Fla. He has practiced in Beaver Dam.

Donald L. Peterson, M.D., a surgeon, is now practicing in McKee. Doctor Peterson graduated from the University of Minnesota Medical School in 1933. He interned at Detroit Receiving Hospital and completed his residency training at Mayo Clinic, Rochester, Minn. He practiced previously in Florida.

Lowell F. Roberts, M.D., a general practitioner, has opened an office in Benton. Doctor Roberts graduated from the University of Louisville School of Medicine in 1964 and completed his internship at Louisville General Hospital in 1965.

Leonard I. Stein, M.D., is now a full-time faculty member in the psychiatry department of the University of Kentucky College of Medicine. Doctor Stein graduated from the University of Wisconsin Medical School in 1960. He interned at Los Angeles County General Hospital and received his residency training at the University of Wisconsin Hospital. He has practiced at Mendota State Hospital, Madison, Wisc.

A. C. Wright, M.D., a general practitioner, has opened an office in Cynthiana. Doctor Wright graduated from the University of Louisville in 1962 and interned at the Columbus, Ga. Medical Center. He practiced previously in Cadiz and Hazard.

Robert N. Alexander, Jr., M.D., a dermatologist, is associated with Lynch Medical Services and UMWA in Lynch, Ky., and Wise, Va. Doctor Alexander graduated from the University of Tennessee Medical School in 1954. He practiced previously in Memphis, Tenn. and was a member of the faculty of the University of Tennessee Medical School, Memphis.

Donald Miller Clark, M.D., is now practicing at The Highlands Clinic in South Williamson. A 1926 graduate of the University of Vermont Medical School, he practiced previously in Massachusetts.

James R. Delp, M.D. is associated with the Highlands Clinic in Williamson, limiting his practice to ophthalmology. Doctor Delp graduated from Jefferson Medical School in 1959. He practiced previously in Oregon.

Herbert Dickstein, M.D., a pathologist, is practicing at St. Anthony Hospital, Louisville, in association with Laszlo Makk, M.D. Doctor Dickstein graduated from the University of Ghent, Belgium, in 1960 and completed his internship and residency training at Kings County Hospital, Brooklyn, N.Y.

Octavius E. Iglesias, M.D., a pathologist, is now practicing in association with H. E. Resinger, M.D., B. P. Geoghegan, M.D., and L. E. Wallace, M.D. at Good Samaritan Hospital, Lexington. Doctor Iglesias graduated from the University of Havana Medical School in 1943. He has practiced at the University of Havana and at the Veterans Administration Hospital, Lexington.

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Adverse Reactions: Side effects most commonly reported: drowsiness, fatigue and ataxia. Infrequently encountered: confusion, constipation, depression, diplopia, dysarthria, headache, hypotension, incontinence, jaundice, changes in libido, nausea, changes in salivation, skin rash, slurred speech, tremor, urinary retention, vertigo and blurred vision. Paradoxical reactions such as acute hyperexcited states, anxiety, hallucinations, increased muscle spasticity, insomnia, rage, sleep disturbances and stimulation have been reported; should these occur, use of the drug should be discontinued. Because of isolated reports of neutropenia and jaundice, periodic blood counts and liver function tests are advisable during long-term therapy. Minor changes in EEG patterns (low-voltage fast activity) observed during and after therapy and are of no known significance.

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In This Issue

Report of a Family with Hereditary Hemorrhagic Telangiectasia in Western Kentucky

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Meningococcemia and Intravascular Clotting: The Use of Heparin in Management

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Splenic Artery Aneurysm: Brief Review with Two Case Reports

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Complete Contents on page 768

KMA ANNUAL MEETING—September 24, 25, 26
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PRESCRIBING INFORMATION. For complete information consult Official Package Circular. *Indications:* Infections of respiratory, gastrointestinal and genitourinary tracts and skin and soft tissues due to tetracycline-sensitive organisms, in patients with increased susceptibility to monilial infections. *Contraindications:* The drug is contraindicated in patients hypersensitive to its components. *Warnings:* Photodynamic reactions have been produced by tetracyclines. Natural and artificial sunlight should be avoided during therapy. Stop treatment if skin discomfort occurs. With renal impairment, systemic accumulation and hepatotoxicity may occur. In this situation, lower doses should be used. Tooth staining and enamel hypoplasia may be induced during tooth development (last trimester of pregnancy, neonatal period and childhood). *Precautions:* Bacterial superinfections may occur. Infants may develop increased intracranial pressure with bulging fontanels. In gonorrheal therapy, serologic tests for syphilis should be conducted initially and monthly for 3 months. *Adverse Reactions:* Glossitis, stomatitis, nausea, diarrhea, flatulence, proctitis, vaginitis, dermatitis, and allergic reactions may occur. *Usual Adult Dosage:* 1 capsule q.i.d. Continue for 10 days in Beta-hemolytic streptococcal infections. Administer one hour before or two hours after meals. *Supplied:* Capsules, bottles of 16 and 100. Each capsule contains tetracycline phosphate complex equivalent to 250 mg. tetracycline HCl activity and 250,000 units of nystatin. For Oral Suspension, 125 mg. tetracycline and 125,000 u. nystatin/5 ml., 60 ml. bottles.

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Volume 66 • September 1968

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JOURNAL of the KENTUCKY MEDICAL ASSOCIATION

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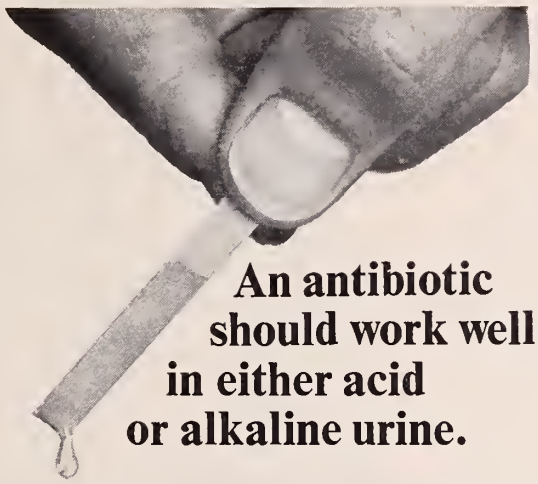
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An antibiotic should work well in either acid or alkaline urine.

It isn't always necessary to adjust urinary pH in treating G.U. infections.

Not when the causative organism is a strain sensitive to DECLOMYCIN® Demethylchlortetracycline, as is often the case.

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Effectiveness: DECLOMYCIN Demethylchlortetracycline should be equally or more effective therapeutically than other tetracyclines in infections caused by organisms sensitive to the tetracyclines.

Contraindication: History of hypersensitivity to demethylchlortetracycline.

Warning: In renal impairment, usual doses may lead to excessive accumulation and liver toxicity. Under such conditions, lower than usual doses are indicated, and, if therapy is prolonged, serum level determinations may be advisable. A photodynamic reaction to natural or artificial sunlight has been observed. Small amounts of drug and short exposure may produce an exaggerated sunburn reaction which may range from erythema to severe skin manifestations. In a smaller proportion, photoallergic reactions have been reported. Patients should avoid direct exposure to sunlight and discontinue drug at the first evidence of skin discomfort. Necessary subsequent courses of treatment with tetracyclines should be carefully observed.

Precautions: Overgrowth of nonsusceptible organisms may occur. Constant observation is essential. If new infections appear, appropriate measures should be taken. In infants, increased intracranial pressure with bulging fontanels has been observed. All signs and symptoms have disappeared rapidly upon cessation of treatment.

Side Effects: Gastrointestinal system – anorexia, nausea, vomiting, diarrhea, stomatitis, glossitis, enterocolitis, pruritus ani. Skin – maculopapular and erythematous rashes; a rare case of exfoliative dermatitis has been reported. Photosensitivity; onycholysis and discoloration of the nails (rare). Kidney – rise in BUN, apparently dose-related. Transient increase in urinary output, sometimes accompanied by thirst (rare). Hypersensitivity reactions–urticaria, angioneurotic edema, anaphylaxis. Teeth – dental staining (yellow-brown) in children of mothers given this drug during the latter half of pregnancy, and in children given the drug during the neonatal period, infancy and early childhood. Enamel hypoplasia has been seen in a few children. If adverse reaction or idiosyncrasy occurs, discontinue medication and institute appropriate therapy. Demethylchlortetracycline may form a stable calcium complex in any bone-forming tissue with no serious harmful effects reported thus far in humans.

Average Adult Daily Dosage: 150 mg q.i.d. or 300 mg b.i.d. Should be given 1 hour before or 2 hours after meals, since absorption is impaired by the concomitant administration of high calcium content drugs, foods and some dairy products. Treatment of streptococcal infections should continue for 10 days, even though symptoms have subsided.

Capsules: 150 mg; Tablets: film coated – 300 mg, 150 mg and 75 mg of demethylchlortetracycline HCl.

355-8

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DEMETHYLCHLORTETRACYCLINE

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MESSAGE FROM THE PRESIDENT



Comprehensive Health Planning

THE 89th Congress found Federal grants-in-aid to the states for health purposes a disorganized pattern. An accumulation of unrelated laws allocated funds for venereal disease control, mental health and other categorical programs. These were not coordinated, nor was there any overall health plan.

To correct this, Public Law 89-749 decrees comprehensive health planning, with ultimate abolition of the categorical grants and their replacement by unrestricted block grants.

Each state must have a single agency responsible for supervising health planning functions. This operational agency is advised by a state-wide Health Planning Council composed of representatives of health agencies, providers of health services and consumers of health care, with the consumers in the majority.

The KMA Board of Trustees promptly recognized the importance of this legislation and worked with the administrations of two governors toward the establishment of an effective Health Planning Commission and the Health Planning Council. Governor Nunn, by executive order, has established both bodies on a firm and constructive basis.

For all planning purposes, Kentucky has been divided into 15 multi-county regions. In each of these there will be an area-wide Comprehensive Health Planning Council. These will, like the state Council, be composed of providers and consumers of health services, with the consumers in the majority.

With the state program well organized, physicians locally have an opportunity to demonstrate leadership in developing integrated and effective local health services. By initiating the formation of the area-wide Health Planning Councils, and providing them with adequate information, wise revisions of present health practices are possible. The clear intent of Congress is to develop useful health programs to answer local needs and to avoid the duplication and fragmentation that has proven wasteful.

George F. Brockman



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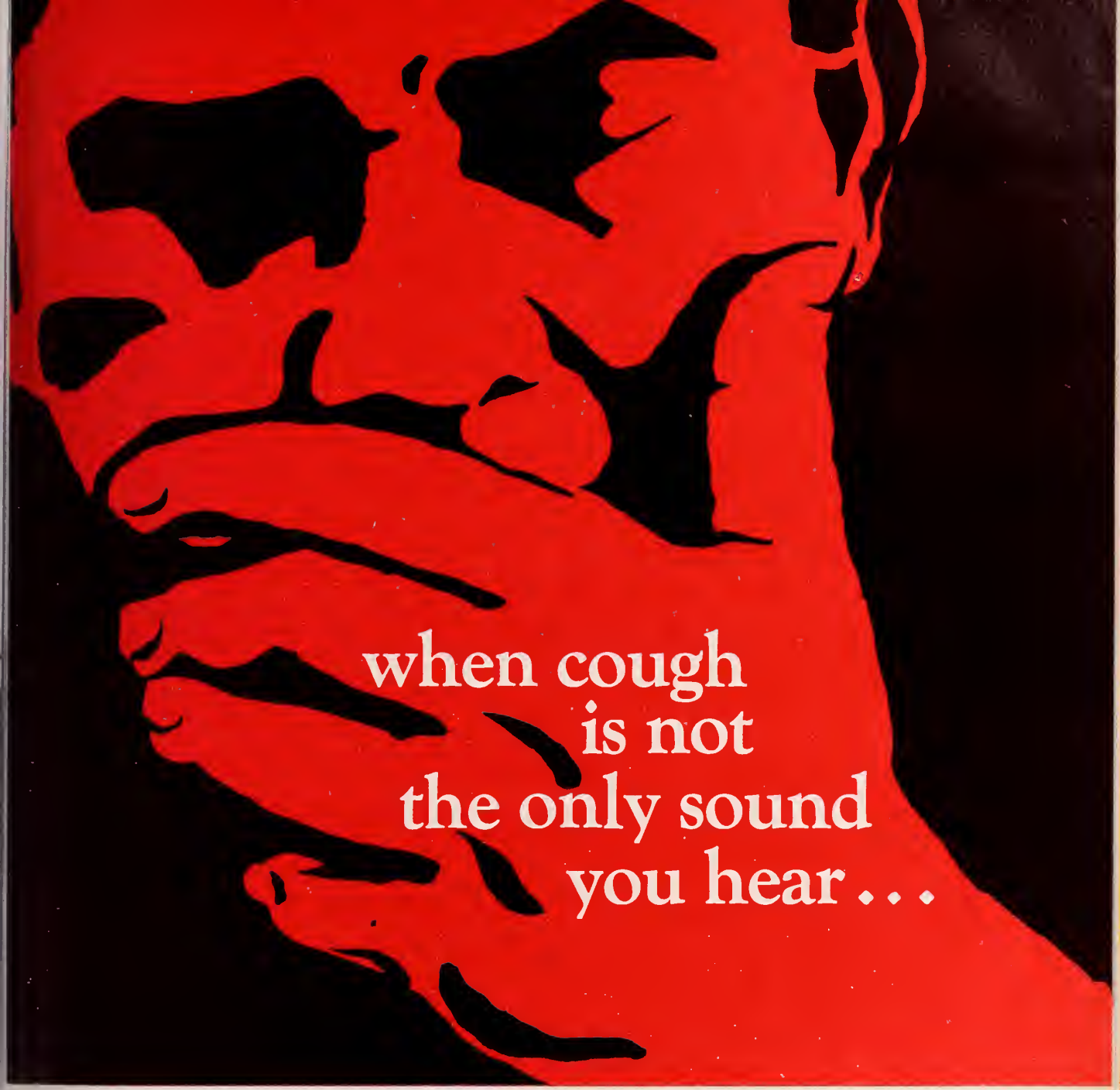
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. . . **because** OMNI-TUSS is indicated for cough associated with upper respiratory tract infections, bronchitis, bronchiectasis, bronchial asthma, emphysema, sinusitis and rhinitis, hay fever, or other allergic conditions. Any of these conditions may exhibit the general symptom syndrome—coughing, wheezing, bronchospasm, and tenacious mucus—which may benefit from the antitussive, bronchodilative, antihistaminic, and expectorant action of Omni-Tuss.

The therapeutic usefulness of Omni-Tuss is enhanced by a unique resin complex formulation providing the clinically desirable advantages of: (1) uniform drug availability throughout an extended period, (2) 8 to 12 hours of symptomatic control, (3) minimal dosage requirement, (4) minimal side effects.

Economical, efficient **b.i.d.** dosage—extremely well-tolerated by children, 6-12, and adults.

'Omni Tuss' Suspension: Each teaspoonful (5 cc.) contains 10 mg. codeine (Warning: May be habit-forming), 5 mg. phenyltoloxamine, 3 mg. chlorpheniramine, 25 mg. ephedrine, all as cation exchange resin complexes of sulfonated polystyrene, and 20 mg. guaiacol carbonate.

Available on prescription only. Class X exempt narcotic. Permissible on oral prescription.

Dosage: *Adults:* 1 teaspoonful (5 cc.) q12h.
Children (6-12 *years*): ½ teaspoonful q12h.

Side Effects: Minimal, but when encountered may include jitteriness, nausea, drying of mouth, insomnia, constipation, which disappear upon adjustment of the dose or discontinuance of treatment.

Precautions and Contraindications: For complete detailed information, refer to package insert or official brochure.

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new evidence for TAO® (triacetyl-oleandomycin)



a
macrolide
antibiotic for the
frequently seen
respiratory infection
in the office
and
for a problem pathogen*
in the hospital.

*Staphylococcus aureus

study I[1]

Results of a 1967 in vitro—in vivo correlation study involving 116 patients with Gram-positive coccal infections in five institutions. All patients were given TAO prior to determining the susceptibility of the offending organism.

97.0%
of the organisms were susceptible to oleandomycin*

98.0%
of the patients responded favorably to TAO® (triacetyloleandomycin)

*In some cases more than one pathogenic organism was isolated from the patient.

study II[2]

Effect of oral therapy with TAO, erythromycin, and cloxacillin on the survival time of Rhesus monkeys after intravenous inoculations of lethal doses of staphylococci, phage type 80/81. (8 monkeys in each group)

conclusion:

*Under the conditions of this study and the doses employed, it was found that

TAO® (triacetyl-oleandomycin) was far superior to erythromycin, as was cloxacillin, a bactericidal agent, and of particular interest, "...bacteriostatic triacetyloleandomycin was as effective or perhaps superior to cloxacillin in preventing lethal (staphylococcal, phage type 80/81) infection."

*It should be pointed out that results obtained in an experimental study of this nature may not necessarily be directly extrapolated to the clinical situation as it pertains to man.

TAO Rx Information

INDICATIONS: Include streptococci, staphylococci, pneumococci and gonococci. Recommended for acute, severe infections where adequate sensitivity testing has demonstrated susceptibility to this antibiotic and resistance to less toxic agents. **CONTRAINDICATIONS AND PRECAUTIONS:** Not recommended for prophylaxis or in the treatment of infectious processes which may require more than ten days continuous therapy. In view of the possible hepatoxicity of this drug when therapy beyond ten days proves necessary, other less toxic agents should be used. If clinical judgement dictates continuation of therapy for longer periods, serial monitoring of liver profile is recommended, and the drug should be discontinued at the first evidence of any form of liver abnormality. When treating gonorrhea in which lesions of primary or secondary syphilis are suspected, proper diagnostic procedures, including darkfield examinations, should be followed. In other cases in which concomitant syphilis is suspected, monthly serological tests should be made for at least four months. Contraindicated in pre-existing liver disease or dysfunction, and in individuals hypersensitive to the drug. Although reactions of an allergic nature are infrequent and seldom severe, those of the anaphylactoid type have occurred on rare occasions. When used in streptococcal infections, therapy should be continued for ten days to prevent the development of rheumatic fever or glomerulonephritis. The use of antibiotics may occasionally permit overgrowth of nonsusceptible organisms. A resistant infection or superinfection requires re-evaluation of the patient's therapy. In the event such occurs with this drug the medication should be discontinued, and specific antibacterial and supportive therapy instituted.

References: 1. Isenberg, H. D.: Clinical Evaluation of Laboratory Guidance to Antibiotic Therapy; Health Laboratory Science (July) 1967. 2. Saslaw, S., Carlisle, H. N.: Studies on Therapy of Staphylococcal Infections in Monkeys. 1. Comparison of Cloxacillin, Triacetyloleandomycin and Erythromycin. Proc. Soc. Exp. Biol. & Med.: Vol. 125, No. 4 (Aug.-Sept.) 1967.

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In the complex picture of moderate to severe anxiety...



there is a new reason for prescribing Mellaril (Thioridazine HCl)

effectiveness in mixed anxiety-depression

Long recognized for its usefulness in the treatment of moderate to severe anxiety, Mellaril is now also known to be effective against mixed anxiety-depression.

Often the symptoms of anxiety states are difficult to sort out—even with the most careful probing. The patient may manifest symptoms of agitation, restlessness, insomnia, somatic complaints. But what of the depression that may be mixed in the total picture? It is reassuring to know that Mellaril may be prescribed—with strong possibilities of success—when there is anxiety alone or a mixture of anxiety and depression.

Before prescribing or administering, see Sandoz literature for full product information, including adverse reactions reported with phenothiazines. following is a brief precautionary statement.

Contraindications: Severe central nervous syste depression, comatose states from any cause, hypertensive or hypotensive heart disease of extreme degree.

Warnings: Administer cautiously to patients wh have previously exhibited a hypersensitivity rea (e.g., blood dyscrasias, jaundice) to phenothiazir Phenothiazines are capable of potentiating centr nervous system depressants (e.g., anesthetics, opiates, alcohol, etc.) as well as atropine and phosphorus insecticides. During pregnancy, administer only when necessary.

Precautions: There have been infrequent reports leukopenia and/or agranulocytosis and convulsi seizures. In epileptic patients, anticonvulsant medication should also be maintained. Pigmenta retinopathy may be avoided by remaining withi recommended limits of dosage. Administer cautiously to patients participating in activities requiring complete mental alertness (e.g., drivin Orthostatic hypotension is more common in fem than in males. Do not use epinephrine in treatin drug-induced hypotension. Daily doses in exces 300 mg. should be used only in severe neuropsychiatric conditions.

Adverse Reactions: *Central Nervous System*— Drowsiness, especially with large doses, early in treatment; infrequently, pseudoparkinsonism a other extrapyramidal symptoms; nocturnal confusion, hyperactivity, lethargy, psychotic reactions, restlessness, and headache. *Autonomi Nervous System*—Dryness of mouth, blurred vis constipation, nausea, vomiting, diarrhea, nasal stuffiness, and pallor. *Endocrine System*— Galactorrhea, breast engorgement, amenorrhea, inhibition of ejaculation, and peripheral edema. *Skin*—Dermatitis and skin eruptions of the urtic type, photosensitivity. *Cardiovascular System*— Changes in the terminal portion of the electrocardiogram have been observed in some patients receiving the phenothiazine tranquilize including Mellaril (thioridazine hydrochloride). While there is no evidence at present that these changes are in any way precursors of any signifi disturbance of cardiac rhythm, several sudden a unexpected deaths apparently due to cardiac arr have occurred in patients previously showing electrocardiographic changes. The use of period electrocardiograms has been proposed but woul appear to be of questionable value as a predictiv device. *Other*—A single case described as parotid swelling.

Mellaril®
(Thioridazine HCl) 25 mg. t.i.d.

for moderate to severe anxi y and mixed anxiety-depressi n

SANDOZ SANDOZ PHARMACEUTICALS, HANOVER, N. J.



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No injection after all!

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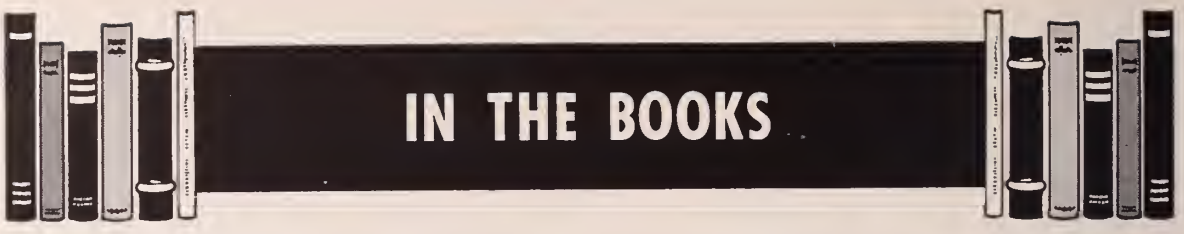
Pen•Vee® K is usually so rapidly and completely absorbed that therapeutic penicillin levels are attained within 15 to 30 minutes. Thus it can often obviate the need for penicillin injections. The higher serum levels produced generally last longer than with those of oral penicillin G.

Indications: Infections susceptible to oral penicillin G: prophylaxis and treatment of streptococcal infections; treatment of pneumococcal, gonococcal, and susceptible staphylococcal infections; prophylaxis of rheumatic fever in patients with a previous history of the disease.
Contraindications: Infections caused by nonsusceptible organisms; history of penicillin sensitivity.
Warnings: Acute anaphylaxis (may prove fatal unless promptly controlled) is rare but more frequent in patients with previous penicillin sensitivity, bronchial asthma or other allergies. Resuscitative (epinephrine, aminophylline, pressor amines) and supportive (antihistamines, methylprednisolone sodium succinate) drugs should be readily available. Other rare hypersensitivity reactions include nephropathy, hemolytic anemia, leucopenia and thrombocytopenia. In suspected hypersensitivity, evaluation of renal and hematopoietic systems is recommended.
Precautions: In suspected staphylococcal infections, perform proper laboratory studies including sensitivity tests. If overgrowth of nonsusceptible organisms occurs (constant observation is essential), discontinue penicillin and take appropriate measures. Whenever allergic reactions occur, withdraw penicillin unless condition being treated is considered life threatening and amenable only to penicillin. Penicillin may delay or prevent appearance of primary syphilitic lesions. Gonorrhea patients suspected of concurrent syphilis should be tested serologically for at least 3 months. When lesions of primary syphilis are suspected, dark-field examination should precede use of penicillin. Treat beta-hemolytic streptococcal infections with full therapeutic dosage for at least 10 days to prevent rheumatic fever or glomerulonephritis. In staphylococcal infections, perform surgery as indicated.
Adverse Reactions: (Penicillin has significant index of sensitization): Skin rashes, ranging from maculopapular eruptions to exfoliative dermatitis; urticaria; serum sickness-like reactions, including chills, fever, edema, arthralgia and prostration. Severe and often fatal anaphylaxis has been reported (see "Warnings").
Composition: Tablets—125 mg. (200,000 units), 250 mg. (400,000 units), 500 mg. (800,000 units); Liquid—125 mg. (200,000 units) and 250 mg. (400,000 units) per 5 cc.

Wyeth Laboratories Philadelphia, Pa.

ORAL **PEN•VEE® K**

(potassium phenoxymethyl penicillin) Wyeth



THE CARE OF THE GERIATRIC PATIENT: edited by E. V. Cowdry, Ph.D.; Published by the C. V. Mosby Company, St. Louis, 1968; 430 Pages; Price $15.75.

This third edition has added these four new chapters: "Aspects of Exercise," "Aspects of Vascular Surgery," "Ophthalmic Aspects," and "Otorhinolaryngologic Aspects" making a total of 28 chapters. The aspects range from "medical" to "surgical," from "spiritual" to "sexual," from "orthopedic" to "dermatologic."

Most of the chapters are bland collections of observations and advices which are so self-evident that their iteration serves no purpose. "Aspects of Exercise" differs in that the rhetoric is so complexly contrived as to conceal any meaning from the reader.

The first chapter, "The Patient and the Physician" is written by the editor of the volume. He says the elderly patient needs ". . . a physician fully qualified by specified training in geriatrics—the opposite of pediatrics." He notes the birthdate of the Board of Pediatrics as 1933 ". . . but formal and exacting training" in geriatrics is ". . . not yet offered." Therefore, "The doctor selected by an elderly person should be an internist . . ." of middle, or greater, age. This advice, supported by several pages of oblique and prejudiced "reasons," should be even more offensive to the patient and the young general practitioner than it is to me, my only deficit being youth.

The book fails to offer any instruction that would distinguish the needs of the geriatric patient or add skill to the geriatrician. It cannot even be recommended to the elderly internist.

A. Evan Overstreet, M.D.

STRABISMUS IN CHILDHOOD: Herbert M. Katzin, M.D. and Geraldine Wilson, R.N.; Published by the C. V. Mosby Company, St. Louis, 1968; 84 Pages; Price $3.95.

This is an 84-page paperback book written, according to the authors, "primarily for the parents." The subject matter covers the etiology of strabismus, the development of vision, the nature the binocular vision, the different types of strabismus, and the various methods of treatment of strabismus with special emphasis placed on orthoptics.

This book is an attempt to explain many facets of a very complex medical and scientific phenomena to lay people. This is done in some detail, including the discussion and definitions of specialized ophthalmic terminology such as convergence, divergence, hypertropia, diplopia, minus and plus lenses, etc. The book explains what should be done for strabismus including the age at which surgery is "usually performed" (age three or four according to the authors) and the fact that orthoptics (in the authors' opinion) improves the prognosis in most cases of strabismus and should be used in most cases.

Strabismus is a difficult subject to teach to medical students and even to residents in ophthalmology. It is understandably difficult to give parents a complete education in this field.

Several questions came to mind concerning parents' reactions to this book. Do they have to learn too much about strabismus to find out what is significant for their own child? Might they be alarmed unnecessarily in some instances by reading about items such as "brain damage"? How would the parents feel toward their own ophthalmologist if he elected to perform surgery at a time other than that mentioned by the author as best (i.e. age three to four)? How would they feel if orthoptics were not being used?

The book contains a description of the psychological and emotional impact of strabismus which is well written. Also to be recommended are the sections on office and hospital procedures.

Perhaps future editions of this book, which is for lay people, could be made somewhat less technical and perhaps less specific in regard to modes of therapy.

William C. Edwards, M.D.

CANCER THERAPY BY INTEGRATED RADIATION AND OPERATION: edited by Benjamin F. Rush, Jr., M.D. and Robert H. Greenlaw, M.D.; Published by the Charles C. Thomas Publishing Company, Springfield, Ill., 1968; 167 Pages; Price $12.75.

This book represents the edited proceedings of the symposium on cancer therapy with irradiation and surgery held at the University of Kentucky in September of 1966. The title refers to *preoperative* radiotherapy followed by surgery. This form of treatment has received considerable attention in recent years, and this book is an excellent, up-to-date review of the subject. The introductory chapters concern themselves with the rationale for combined treatment. This is discussed from the cellular, tissue, and clinical levels, and is covered with remarkable clarity and completeness.

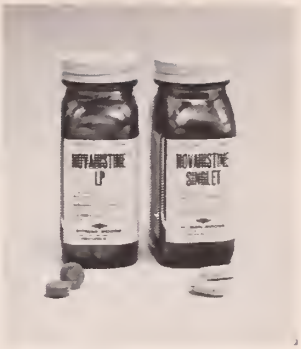
The remaining portions of the book are allotted to discussions of integrated therapy of tumors of the head and neck, thorax, breast, and pelvis. The presentations are generally unbiased towards either specialty, which is a refreshing departure from many previous attempts. Another asset of this volume is the fact that except for two articles specifically devoted to details, the reader is not burdened with radiotherapeutic and surgical techniques, but is given primarily the indications, results, and possible complications to be accrued from combined treatment.

(Continued on Page 845)

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Each Novahistine LP tablet contains phenylephrine hydrochloride, 25 mg.; and chlorpheniramine maleate, 4 mg.
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"Nothing else I've tried seems to work, so I decided to give you a crack at it."



ANSWERS TO YOUR QUESTIONS ABOUT BLUE SHIELD

Q. For services covered under Blue Shield's Standard, Preferred, or C and D Schedules, does Kentucky Blue Shield ever pay the subscriber for services rendered by a physician?

A. Yes, but only when the subscriber has paid his physician in full. When this occurs, please complete and submit the usual Physician's Service Report to Blue Shield with the following exception — Omit DOCTOR'S CODE and insert on this line PAY SUBSCRIBER.

Q. Is it necessary to include on the Blue Shield Physician's Service Report the exact time involved in administering anesthesia?

A. Not required under indemnity certificate. However, several Blue Shield certificates provide payment of physicians' usual and customary or prevailing fees. With regard to anesthesia, this cannot be done without the exact time. Therefore, your cooperation in reporting exact time on all claims will eliminate much correspondence and result in more prompt payment.

Q. If a submitted claim has not been paid by Blue Shield after a reasonable amount of time has elapsed, should a duplicate claim be submitted?

A. No. A duplicate claim will only cause further delay in payment. A letter of inquiry stating the patient's name, certificate number and date of service will be of greater assistance to Blue Shield in effecting payment of your claim.

Q. Will Blue Shield provide an allowance for surgical procedures not listed in the Participating Physicians' Manual?

A. Yes, if the procedure is one which is approved for payment by the Blue Shield Board's Medical Advisory Committee. A complete description of the service performed should be included on the claim form.

Q. Approximately how long does it take Blue Shield to make payment on a claim?

A. Normally seven to 10 days. However, payments are sometimes delayed by the submission of claims that do not adequately describe the service provided or do not give complete information. This necessitates correspondence with the physician or subscriber to obtain the necessary information to handle the claim. Properly completed claims will result in prompt payment.

The muscle relaxant that works before you write a prescription

Relieve painful skeletal muscle spasm in your office in minutes with a single 2 cc. injection of NORFLEX. Then, for sustained relief, write a prescription for NORFLEX tablets, 1 tablet b.i.d.

CONTRAINDICATIONS: Due to its anticholinergic action, NORFLEX should not be used in patients with glaucoma, pyloric or duodenal obstruction, stenosing peptic ulcer, prostatic hypertrophy or obstruction at the bladder neck, cardiospasm (megaesophagus) and myasthenia gravis. Use with caution in patients with tachycardia. Do not use propoxyphene (Darvon®) concurrently.

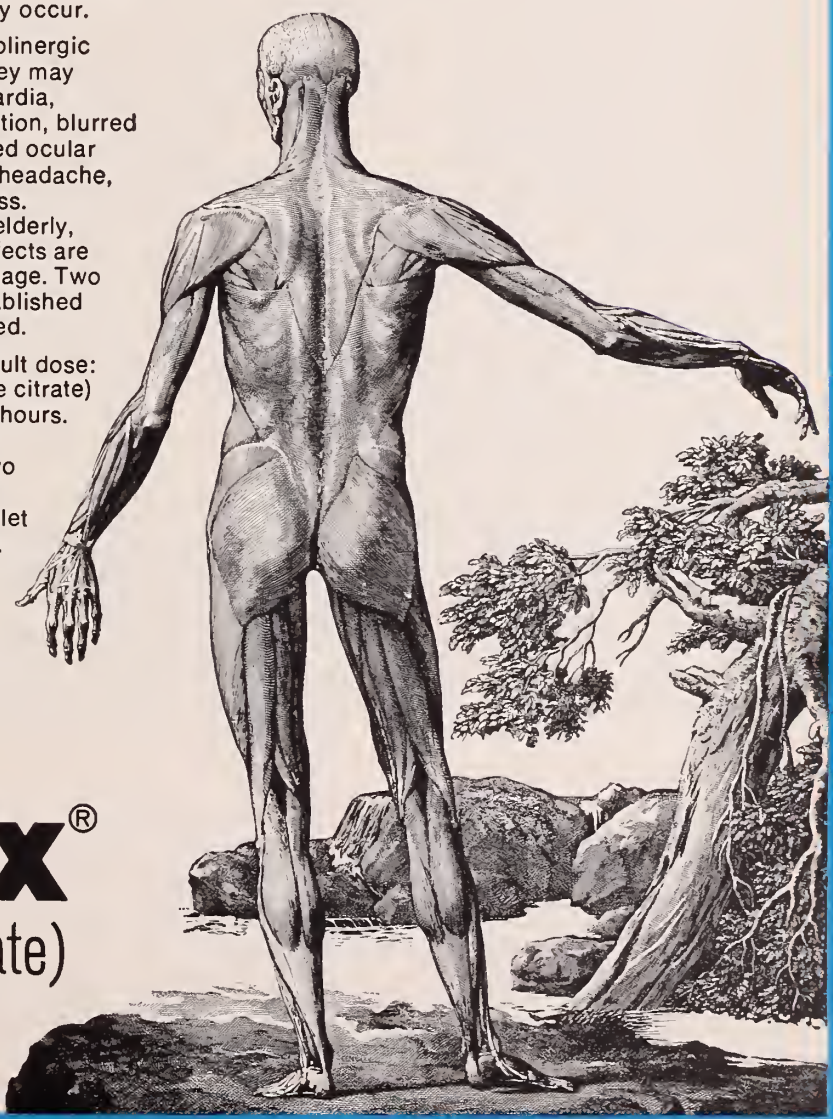
WARNING: Transient lightheadedness or dizziness following NORFLEX-INJECTABLE may occur.

SIDE EFFECTS: Due mainly to anticholinergic action and usually at high dosage. They may include dryness of the mouth, tachycardia, palpitation, urinary hesitancy or retention, blurred vision, dilatation of the pupil, increased ocular tension, weakness, nausea, vomiting, headache, dizziness, constipation, and drowsiness. Infrequently, mental confusion in the elderly, urticaria or other dermatoses. Side effects are usually eliminated by reduction in dosage. Two cases of aplastic anemia, with no established causal relationship, have been reported.

DOSAGE: **INJECTABLE** — Average adult dose: one ampul, 2 cc. (60 mg. orphenadrine citrate) I.M. or I.V. May be repeated every 12 hours. Relief may be maintained with one NORFLEX tablet b.i.d. **TABLETS** — Two tablets per day for adults, one in the morning, one in the evening. Each tablet contains 100 mg. orphenadrine citrate.

For full information, see Package Insert or P.D.R.

Riker Laboratories
Northridge, California 91324



Norflex®
(orphenadrine citrate)



Tandearil® in Osteoarthritis
oxyphenbutazone

Contraindications: Edema; danger of cardiac decompensation; history or symptoms of peptic ulcer; renal, hepatic or cardiac damage; history of drug allergy; history of blood dyscrasia. The drug should not be given when the patient is senile or when other potent drugs are given concurrently.
Warning: Tandearil is an analog of phenylbutazone; sensitive patients may be cross-reactive. If coumarin-type anticoagulants are given simultaneously, watch for excessive increase in prothrombin time. Instances of severe bleeding have occurred. Persistent or severe dyspepsia may indicate peptic ulcer; perform upper gastrointestinal x-ray diagnostic tests if drug is continued. Pyrazole compounds may potentiate the pharmacologic action of sulfonylurea, sulfonamide-type agents and insulin. Carefully observe patients receiving such therapy. Use with caution in the first trimester of pregnancy and in patients with thyroid disease.
Precautions: Before prescribing, carefully select patients, avoiding those responsive to routine measures as well as contraindicated patients. Obtain a detailed history and a complete physical and laboratory examination, including a blood count. The patient should not exceed recommended dosage, should be closely supervised and should be warned to discontinue the drug and report immediately if fever, sore throat, or mouth lesions (symptoms of blood dyscrasia), sudden weight gain (water retention), skin reactions, black or tarry stools or other evidence of intestinal hemorrhage occur. Make complete blood counts at weekly intervals during early therapy and at 2-week intervals thereafter. Discontinue the drug immediately and institute countermeasures if the white count changes significantly, granulocytes decrease, or immature forms appear. Use greater care in the elderly and in hypertensives.
Adverse Reactions: The more common are nausea and edema. Swelling of the ankles or face may be minimized by withholding dietary salt, reduction in dosage or use of diuretics. In elderly patients and in those with hypertension, the drug should be discontinued if the appearance of edema. The drug has been associated with peptic ulcer and may rea

Pain Break"
for an osteoarthritic.

Tandearil can usually ease it.

t 46, her knees still look good on the outside. But inside, there may e the familiar picture of osteoarthritis.



If aspirin doesn't help, Tandearil often will.
Pain and stiffness begin to ease up in 3 or 4 days.
You can often maintain response with a daily dose of only 1 or 2 tablets.

f course, Tandearil is not for every osteoarthritic. Select your atients carefully and follow them in line with the Contraindications, recautions, Warning, and Adverse Reactions listed below.

ut for many aspirin-stubborn steoarthritics, let Tandearil ase the unwelcome pain eaks of osteoarthritis.

Tandearil®
oxyphenbutazone

atent peptic ulcer. The patient should ucted to take doses immediately after r with milk to minimize gastric upset. sh occasionally occurs. If it does, ly discontinue the drug. Agranulocyxfoliative dermatitis, Stevens-Johnson ne, Lyell's syndrome (toxic necrotizdermolysis) or a generalized allergic similar to a serum sickness synmay occur and require permanent wal of medication. Agranulocytosis ur suddenly in spite of regular, renormal white counts. Stomatitis, salind enlargement, vomiting, vertigo and may occur. Leukemia and leukemoid is have been reported. While not defitributable to the drug, a causal relacannot be excluded. Thrombocytopenic purpura and aplastic anemia may occur. Confusional states, agitation, headache, blurred vision, optic neuritis and transient hearing loss have been reported, as have hyperglycemia, hepatitis, jaundice, hypersensitivity, angiitis, pericarditis and several cases of anuria and hematuria. With long-term use, reversible thyroid hyperplasia may occur infrequently. Moderate lowering of the red cell count due to hemodilution may occur.

For complete details, please see full Prescribing Information.

Dosage in Osteoarthritis: Initial: 3 to 6 tablets daily in divided doses. Usually unnecessary to exceed 4 tablets daily. A trial period of one week is considered adequate to determine the therapeutic effect of the drug. Maintenance: Effective level often achieved with 1 or 2 tablets daily, should not exceed 4 tablets daily. In selecting appropriate dosage in any specific case, consideration should be given to the patient's weight, general health, age and other factors influencing drug response.
Availability: Tan, round, sugar-coated tablets of 100 mg. in bottles of 100 and 1000.

(B) 46-800-A

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Ardsley, New York 10502

TA-5806AR

From the files of the

COMMITTEE FOR THE

STUDY OF MATERNAL MORTALITY

CASE 5-67. A 43 year old married white gravida 4 para 3 was seen at term by her private physician on June 3, 1967. She complained of recent headaches, had albuminuria and edema of the feet and ankles and a blood pressure of 180/100. She was immediately hospitalized for induction because of preeclampsia.

On admission at 3:25 p.m., her blood pressure was 160/80, pulse 80 and respirations 20. At 4:45 p.m. the blood pressure was 130/80, although no medication had been given. The fetal heart beat was counted at 132 in the right lower quadrant. Vaginal examination at 5:30 p.m. showed the cervix to be dilated to one fingertip, the membranes were intact. A pitocin infusion was started consisting of 1 cc pitocin in 1000 cc of five percent dextrose in water. Mild uterine contractions at five minute intervals began at 6:15 p.m. At 7:55 p.m., vaginal palpation showed that the cervix had thinned and was 4 cm dilated; the membranes were still intact, and contractions were noted at three minute intervals. At 8:10 p.m. the patient was sedated with 50 mg Demerol, and 1/150 grain Scopolamine, both given intravenously. At 8:20 p.m. her physician found the presenting part still high, the cervix was 5 cm dilated and the membranes intact. The cervix had dilated to 8 cm at 8:50 p.m., and the patient was taken to the delivery room and given a saddle block with heavy nupercaine and neo-synephrine. At 9:00 p.m. her membranes ruptured spontaneously, the fluid having a heavy greenish stain. The fetal heart beat was counted at 132 and the blood pressure was 140/90.

The first stage of labor lasted approximately five hours. She delivered a seven pound girl at 9:35 p.m. over a right midline episiotomy by low forceps extraction. The placenta was expressed intact at 9:30 p.m. The cervix was inspected and no lacerations were found. While the episiotomy was being repaired the uterus relaxed although the pitocin infusion was still running. One cc of Methergine was given. The patient began to bleed profusely from the uterus. Type and cross match were ordered for blood, a consultant was called, and a cut down was made on the left ankle. The cervix was repalpated, the uterus reexplored, and both appeared intact. Massage of the uterus had no effect on the bleeding. Intravenous fluids were begun in the left arm, and whole blood was obtained at 11:30 p.m. Five pints of fresh blood, five grams of fibrinogen and seven grams of Amicar were administered. In spite of these efforts, the patient died at 12:25 a.m. on June 4, 1967. The husband refused permission for autopsy. The final diagnosis was amniotic fluid embolism with secondary afibrinogenemia.

Comments

This was classified as a direct obstetrical death with preventable factors on the part of the physician. The Committee reemphasized that the diagnosis of amniotic fluid embolism is a pathologic, not a clinical diagnosis. The Committee agreed, however, that this diagnosis may have been correct, since no clots were passed at the time of the postpartum hemorrhage, the cervix was rechecked for lacerations and the uterus was reexplored. The Committee thought this patient may have had medical indications for induction in the physician's office, but this was no longer the case when she was admitted to the hospital. The physician is always responsible for problems arising during an elective induction of labor.

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Parepectolin for quick relief of acute diarrhea
... soothes colicky pain with paregoric*
... consolidates fluid stools with pectin
... adsorbs irritants with kaolin, and protects intestinal mucosa

In children, Parepectolin may be used to control diarrhea promptly and prevent dehydration, until etiology has been determined. In some cases, Parepectolin may be all the therapy necessary.

Parepectolin®

Each fluid ounce of creamy white suspension contains:
*Paregoric (equivalent) ..... (1.0 dram) 3.7 ml.
Contains opium (¼ grain) 15 mg. per fluid ounce.
warning: may be habit forming
Pectin ..... (2½ grains) 162 mg.
Kaolin (specially purified) .... (85 grains) 5.5 Gm.
(alcohol 0.69%)
Usual Children's Dose: One or two teaspoonfuls three times daily.

ROER

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Summation:
In addition to its primary indications for duodenal and gastric ulcer, Robinul Forte (glycopyrrolate) is indicated for other G-I conditions that may benefit from anticholinergic therapy. Robinul-PH Forte (glycopyrrolate 2 mg. with phenobarbital) is indicated when these situations are complicated by mild anxiety and tension.

Contraindications: Glaucoma, urinary bladder neck obstruction, pyloric obstruction, stenosis with significant gastric retention, prostatic hypertrophy, duodenal obstruction, cardiospasm (megaesophagus), and achalasia of the esophagus, and in the case of Robinul-PH Forte, sensitivity to phenobarbital.

Precautions: Administer with caution in the presence of incipient glaucoma.

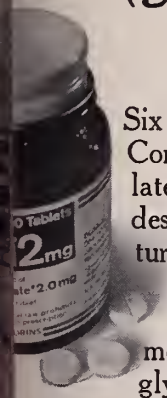
Adverse Reactions: Dryness of the mouth, blurred vision, urinary difficulties, and constipation are rarely troublesome and may generally be controlled by reduction of dosage. Other side effects associated with the use of anticholinergic drugs include tachycardia, palpitation, dilatation of the pupil, increased ocular tension, weakness, nausea, vomiting, headache, dizziness, drowsiness, and rash.

Dosage: Should be adjusted according to individual patient response. Average and maximum recommended dose is 1 tablet three times a day; in the a.m., early p.m., and at bedtime. See product literature for full prescribing information.
Supply: Robinul (glycopyrrolate 1 mg.): Robinul Forte (glycopyrrolate 2 mg.): Robinul-PH (glycopyrrolate 1 mg.) with phenobarbital 16.2 mg. (Warning: may be habit forming); Robinul-PH Forte (glycopyrrolate 2 mg.) with phenobarbital 16.2 mg. (Warning: may be habit forming), in bottles of 100 and 500 tablets. A. H. Robins Company, Richmond, Va. 23220.

A·H·ROBINS

n peptic ulcer therapy, won't you ve Robinul® Forte a Fair Trial?

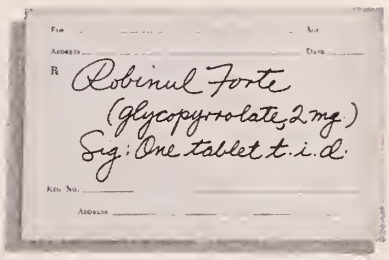
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Six years ago the A. H. Robins Company introduced glycopyrrolate, a unique anticholinergic agent described in the prescribing literature as more closely approaching the ideal compound for controlling gastric hyperacidity and hypermotility of the G-I tract. Although glycopyrrolate (Robinul Forte) ood acceptance among numerous physicians, hers just didn't seem to want to give it a try, y because the anticholinergic they were al- sing was giving acceptable results.

er, we believe you'll agree there's always r a better anticholinergic. This is why we're you to give Robinul Forte a fair trial. Robinul xerts a highly specific antisecretory action and inhibitory effect on intestinal tone. We're con- you'll agree that this is indeed an outstanding en you observe its outstanding suppression of mptoms. Furthermore, it is unique in that it intestinal tone, yet has little or no effect on is. In addition, the incidence of the more me peripheral side effects is low.

er does the physician have to look for extreme th as the measure of his anticholinergic's effectiveness. The only way we can demonstrate to you firsthand the efficacy of glycopyrrolate (Robinul Forte) is for you to try it in your practice. That's why we're asking you to give it a Fair Trial. How can you give it a Fair Trial? You do it this way:



First: When you see your very next ulcer patient, write him a script as shown.

Next: Wait 10 days or until your patient comes in for his next appointment and get his "verdict" as to how he feels. Examine all the evidence and make your evaluation of his condition.



Finally: Render **your** verdict. If it's "significant improvement and marked relief of symptoms," then we believe you'll agree that Robinul Forte has proved its worth, and we rest our case. If not, consider our case for Robinul Forte closed. That's a Fair Trial, Doctor, and it's all we ask.

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(glycopyrrolate, 2 mg.)

The summation is an important part of every case. You'll find ours on the preceding page, Doctor.



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Plan now to join your colleagues in Miami Beach. Be sure to look for the complete scientific program, plus forms for advance registration and hotel accommodations in the October 21st issue of JAMA.



Is it depression?

He says "It's my stomach..."

...but his other symptoms:

functional somatic complaints, anxiety, insomnia, anorexia, feelings of guilt strongly suggest an underlying depression.

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when the diagnosis is depression

ELAVIL® HCl
(AMITRIPTYLINE HCl | MSD)

Indications: Mental depression and mild anxiety accompanying depression.

Contraindications: Glaucoma and predisposition to urinary retention. Not recommended in pregnancy.

Precautions and Side Effects: Drowsiness may occur within the first few days of therapy. Patients should be warned against driving a car or operating machinery or appliances requiring alert attention. When depression is accompanied by anxiety or agitation too severe to be controlled by ELAVIL HCl alone, a phenothiazine tranquilizer may be given concomitantly. Suicide is always a possibility in mental depression and may remain until significant remission occurs. Supervise patients closely in case they may require hospitalization or concomitant electroshock therapy. Untoward reactions have been reported after the combined use of antidepressant agents having varying modes of activity. Accordingly, consider possibility of potentiation in combined use of antidepressants. Monoamine oxidase inhibitor drugs may potentiate other drugs and such potentiation may even cause death; permit at least two weeks to elapse between administration of two agents; in such patients, initiate therapy with ELAVIL HCl cautiously with gradual increase in dosage required to obtain a satisfactory response. Caution patients about errors of judgment due to change in mood, and that the response to alcohol may be potentiated. May provoke mania or hypomania in manic-depressive patients.

Side effects include drowsiness; dizziness; nausea; excitement; hypotension; fine tremor; jitteriness; weakness; headache; heartburn; anorexia; increased perspiration; incoordination; allergic-type reactions manifested by skin rash, swelling of face and tongue, itching; numbness and tingling of limbs, including peripheral neuropathy; activation of schizophrenia which may require phenothiazine tranquilizer therapy; epileptiform seizures in chronic schizophrenics; temporary confusion, disturbed concentration or, rarely, transient visual hallucinations on high doses; evidence of anticholinergic activity, such as tachycardia, dryness of the mouth, blurring of vision, urinary retention, constipation; paralytic ileus; jaundice; agranulocytosis.

Careful observation of all patients is recommended. The antidepressant activity may be evident within 3 or 4 days or may take as long as 30 days to develop adequately, and lack of response sometimes occurs. Response to medication will vary according to severity as well as type of depression present. Elderly patients and adolescents can often be managed on lower dosage levels.

Supplied: Tablets ELAVIL HCl, containing 10 mg., 25 mg., and 50 mg. amitriptyline HCl, bottles of 100 and 1000; Injection ELAVIL HCl, in 10-cc. vials, containing per cc.: 10 mg. amitriptyline HCl, 44 mg. dextrose, 1.5 mg. methylparaben, and 0.2 mg. propylparaben.

For more detailed information, consult your Merck Sharp & Dohme representative or see the package circular.

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KMA ANNUAL MEETING

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Four one-half day general sessions and 16 specialty group meetings will feature current information about medical progress as discussed by distinguished authorities covering a wide variety of topics.

A highlight of the meeting will be color TV presentations each day followed by stimulating panel discussions. Carefully selected scientific and technical exhibits will be on display throughout the three-day session. Plan now to attend.

IN KENTUCKY

SEPTEMBER

24-26 KMA ANNUAL MEETING, Convention Center and Kentucky Hotel, Louisville

OCTOBER

16-17 Home Care Conference, location to be announced, Louisville

24 Chemical Industry Workshop on Occupational Health, Executive Inn, Louisville

NOVEMBER

12-13 "Small-for-Date Infant Symposium," department of pediatrics, University of Louisville School of Medicine, Stouffer's Inn, Louisville

IN SURROUNDING STATES

SEPTEMBER

20 Medical Technology Symposium, Cleveland Clinic Educational Foundation, 9 a.m., Cleveland, Ohio

23-Oct. 4 Laryngology and Bronchoesophagology postgraduate course, University of Illinois College of Medicine, Illinois Eye and Ear Infirmary, Chicago, Ill.

28-Oct. 3 International College of Surgeon's two Western Hemisphere Federations joint meeting, Honolulu, Hawaii

30-Oct. 1 American Medical Association 28th Congress on Occupational Health, Waldorf-Astoria Hotel, New York, N.Y.

OCTOBER

6 International College of Surgeons Sixteenth Biennial International Congress, Tokyo, Japan

16-17 Update 1968—Selected Topics in Nursing, Cleveland Clinic Educational Foundation, Cleveland, Ohio

19-24 American Academy of Pediatrics, 37th Annual Meeting, Palmer House Hotel, Chicago, Ill.

31-Nov. 2 American college of Gastroenterology Annual Course in Postgraduate Gastroenterology, Statler Hilton, Boston, Mass.

NOVEMBER

6-7 Cleveland Clinic Educational Foundation Postgraduate Course "Upper Gastrointestinal Tract Disease—Clinical Aspects", Cleveland, Ohio

7-9 Second Annual Conference, "Today's Hospital Problems," Mound Park Hospital Foundation, Tides Hotel and Bath Club, Redington Beach, Fla.

11-15 American Public Health Association Annual Meeting, Cobo Hall, Detroit, Mich.

18-21 Southern Medical Association Annual Meeting, New Orleans, La.

DECEMBER

1-4 American Medical Association, Annual Clinical Convention, Miami Beach, Fla.

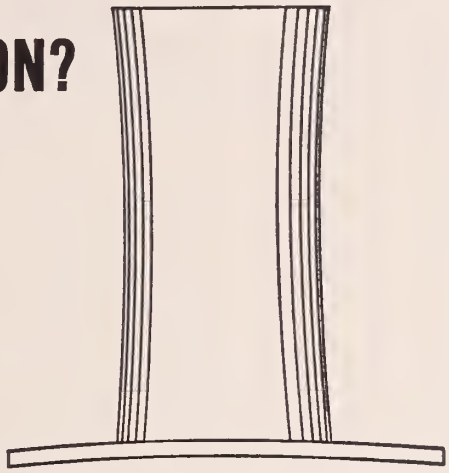
Flying Physicians To Meet

The Kentucky Flying Physicians will have a 12:30 p.m. luncheon Tuesday, September 24 at the Kentucky Hotel, according to George Gumbert, Jr., Lexington. All physician pilots and their wives are urged to attend.

Further information may be obtained from Doctor Gumbert who is in charge of the arrangements.

OPTICAL ILLUSION?

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*As shown by *in vitro* studies.

1. Crunden, A. B., Jr., and Davis, W. A.: Am. J. Obst. & Gynec. *65*:311 (Feb.) 1953.



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phosphorated carbohydrate solution
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ROER
WILLIAM H. RORER, INC.
Fort Washington, Pa.

MEDICAL SCHOOL NEWS AND VIEWS

Rhetoric Versus Research in Medical Education†

RICHARD N. WATKINS*

IN the May issue of *The Journal* the major indictment of current medical education which we voiced was that it must produce many different types of physicians for today's world, from the social engineer to the generalist to the plastic surgeon; and yet it remains a uniform and lockstep program which attempts to give students close familiarity with all specialties in the futile hope of producing the "rounded," undifferentiated physician, capable in any of the myriad medical areas.

As a result of this philosophy, students are force-fed detail relevant to the specialist only, to the detriment of the student's liberal development in the judgmental skills which should be the goal of his education prior to his specialization in medical school. Thus, we have the examinations at which physicians and students alike chuckle—physicians because they know that they could never pass the examinations again and students because they know that they will never have to pass them again. Neither student nor physician is troubled by the implied loss of knowledge because they know that it is irrelevant to medicine as it is practiced. As we observed in the May issue, this inefficiency in medical education becomes, in the light of social needs, serious.

In the cold light of logic, what can we say of a system which requires that the novice in medicine pass examinations which the expert cannot? Why does such a policy persist?

Certainly, there is a complex of reasons for this persistence varying somewhat from school to school; but some generalizations may be made. In the May issue we made analogy between the current resistance to change in medical education and the inertia which kept the classical languages in public education for so long: the apathy of the student who limits his consideration to what stands between himself and his degree, and who solaces himself that it has been done this way for years; the teachers' lack of interest in devoting energy to innovation when he believes the present system is, in the main, adequate for the future; the lack of scope which binds the teacher whose broadest view is to the limits of his own field, making judgment upon objects within that field, but never upon the relevance and position of the field itself; and finally, that natural resistance to change which occurs when the individual teacher misinterprets the re-evaluation of the course which he teaches as the devaluation of his role.

These mechanisms of inertia are hypothetic and yet certainly they are close enough to truth to allow us to recognize a common substratum: the lack of hard, researched information, delineating both the types of health personnel we need and the efficacy of our methods of producing them. This information should be truly public to all members of the medical community, sufficient to reveal the necessity for adaptation in medical education, sufficient to enlarge the scope of both educator and student until each exercises judgement not only within the sphere of his daily activity, but upon the purpose and design of that activity within the larger sphere of society.

At present, such information is hardly available, although there is at least one journal devoted to medical education. Certainly, such information is not truly public, truly disseminated. Of all the statistics delivered in medical school, never do we find a time-analysis of the Kentucky general practitioner's work, the problems, the decisions and the levels of knowledge which he employs in those decisions. For all the rhetoric on what should be included in the upperclassman's clinical clerkship, never a mention of Dale Schumacher's article in the March issue of the *Journal of Medical Education* which presents an analysis of the percentage of time spent in various tasks in a clerkship. For all the curriculum committee's discussion on whether parasitology should be included as a separate course, never an analysis of the frequency with which various types of Kentucky practitioners encounter parasites, and the level of knowledge necessary for intelligent diagnosis and treatment. Finally, for all the student complaints about neuroanatomy, never a study to determine the level of neuroanatomical knowledge used and usable in the practice of the family physician, the neurosurgeon or the epidemiologist. As a result, the student continues to spend only 13 percent of his clerkship time in contact with the patient; an examination in parasitology still requires the student to distinguish filaria by the spots of nucleic acid in the tail; and the student, whether destined to become a neurosurgeon or an epidemiologist, still memorizes the olfactory fibers running in the septum pellucidum.

(*To be concluded next month*)

†*The first part of a two-part article which explores the necessity of research as the basis for modification of medical education, and the role of the student, teacher and practitioner in this research*

**Junior medical student, University of Kentucky College of Medicine, Lexington*

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TETRACYCLINE



Effectiveness: ACHROMYCIN Tetracycline is a crystalline broad-spectrum antibiotic which provides effective therapeutic activity against susceptible microorganisms.

Contraindication: History of hypersensitivity to tetracycline.

Warning: In renal impairment, usual doses may lead to excessive accumulation and liver toxicity. Under such conditions, lower than usual doses are indicated and, if therapy is prolonged, serum level determinations may be advisable. Some patients may develop a photodynamic reaction to natural or artificial sunlight. Those with a history of photosensitivity reactions should avoid direct exposure to sunlight while under treatment. Discontinue drug at first evidence of skin discomfort.

Precautions: Use may result in overgrowth of nonsusceptible organisms. Constant observation is essential. If new infections appear, take appropriate measures. Use of tetracycline during teeth development may cause discoloration of teeth.

Side Effects: Gastrointestinal system—anorexia, nausea, vomiting, diarrhea, stomatitis, glossitis, enterocolitis, pruritus ani. Skin—maculopapular and erythematous rashes (a case of exfoliative dermatitis has been reported); photosensitivity reaction, onycholysis and discoloration of nails (rare). Kidney—rise in BUN, apparently dose-related. Hypersensitivity reactions—urticaria, angioneurotic edema, anaphylaxis. In young infants, bulging fontanels have been reported following full therapeutic dosage. This symptom has disappeared rapidly when drug is discontinued. Teeth—dental staining (yellow-brown) in children of mothers given tetracycline during the latter half of pregnancy, and in children given the drug during the neonatal period, infancy and early childhood. Enamel hypoplasia has been seen in a few children. Blood—anemia, thrombocytopenic purpura, neutropenia, eosinophilia. Liver—cholestasis (rare), usually at high dosage. Tetracycline may form a stable calcium complex in bone-forming tissue. If adverse reaction or idiosyncrasy occurs, discontinue medication and institute appropriate therapy.

Average Adult Daily Dosage: One Gm. per day, in 4 divided doses of 250 mg. each. Should be given 1 hour before or 2 hours after meals, since absorption is impaired by the concomitant administration of high calcium content drugs, foods and some dairy products. Treatment of streptococcal infections should continue for 10 days, even though symptoms have subsided.

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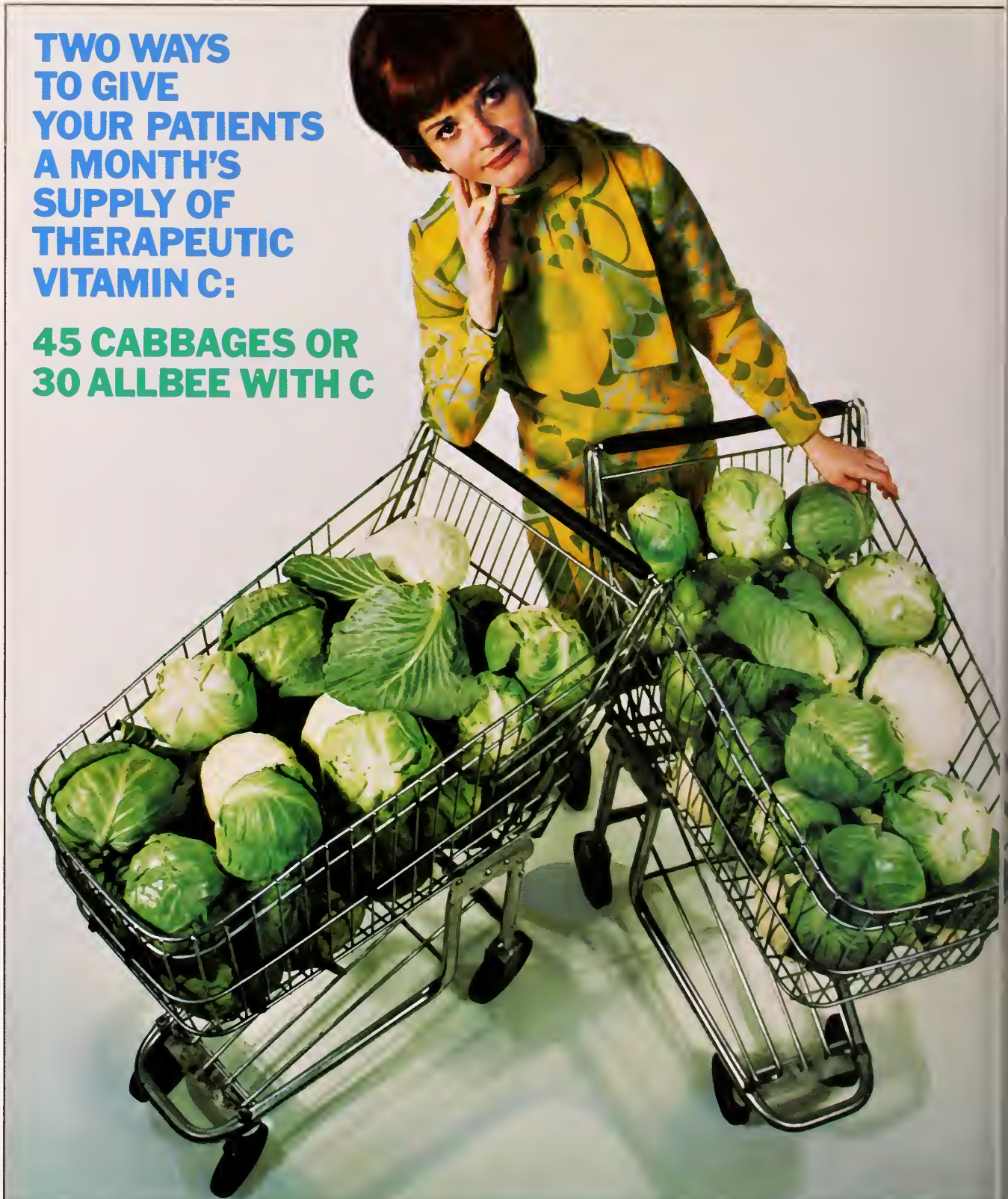
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PUBLIC HEALTH PAGE

Comprehensive Health Planning†

Russell E. Teague, M.D., M.P.H.
Commissioner of Health
Commonwealth of Kentucky

FROM time to time, for unknown reasons, an old word comes into such frequent use one would think it is a new discovery. Such a currently popular word is "comprehensive." We are used to thinking of comprehensive insurance coverage, we are not so used to comprehensive vacations. Many of us are not at all sure what is entailed in comprehensive health planning. Is it something new or is it merely something old with a new name? Is it something good or is it bad? Is it a threat or a promise? At worst, is it the materialization of a bureaucratic nightmare?

For either the health professional or the layman, the first attempt at trying to conceptualize comprehensive health planning is likely to resemble the five blind men's efforts to describe the elephant. By the same token, many people have used less flattering terms in describing the present state of confusion, multiplicity, duplications and gaps in our health programs. In recent years our expenditures for health services have risen sharply while our relative health status among nations of the world probably has fallen. These facts and others have caused knowledgeable people in and out of government to wonder if there might not be a better way of doing things. It was agreed that any effective health system must properly relate the private, public and voluntary components. Sophisticated task forces and study groups were created to determine how this might best be accomplished. The work of these groups, made up of both professional and lay members, led to extensive hearings before congressional subcommittees and resulted in many of the working groups' recommendations being incorporated into P.L. 89-749. It is an attempt on the part of the federal government to return larger shares of control over their own health destiny to state and local areas.

The law has five major sections. Briefly, they are as follows:

Section 314(a) provides for state level planning for health services, health manpower, and health facilities. It requires that a single state agency be created for guidance and/or administration and coordination of programs. It requires that a high level council be created to advise that agency in carrying out its function.

Section 314(b) requires that health planning councils be established for the several areas within a state. It is envisioned that this group will be the major force for selecting priorities and causing programs to be initiated, expanded or perhaps curtailed.

Section 314(c) makes provision for badly needed training in health planning for persons already in the field or those to come into it.

Section 314(d) frees major state health agencies from the old system of categorical grants thus allowing greater discretion at the state level regarding expenditure of funds.

Section 314(e) makes possible the starting of new programs or innovative methods to use against old problems. In other words, it provides for a testing ground at the local level.

Just how all this is to be accomplished has been left largely up to the states, but must be done in accordance with broad guidelines laid down by the U. S. Public Health Service. Kentucky has moved ahead toward implementing this new concept with all the speed prudence would dictate in a matter of such importance and far reaching implications. The Governor has designated a Health Planning Commission to serve as the single state agency for health planning as required by law. The Commission is composed of the Governor as chairman, the Commissioner of Health as vice-chairman, the Commissioner of Mental Health, the Commissioner of Finance, and the Director of the Office of Program Development. This Commission formulates broad policies with the help and advice of a State Health Planning Council. The Council consists of 25 voting members plus the Commissioner of Health, the Commissioner of Mental Health, the Commissioner of Economic Security, the Commissioner of Labor, the Superintendent of Public Instruction, the Executive Director of the Tuberculosis Hospital Commission, and the Medical Director of the Commission for Handicapped Children as ex-officio members. The chairman of the Council and a majority of the members must be consumers of health services rather than providers as defined by law. To insure relistic representation for local areas, a maximum of 15

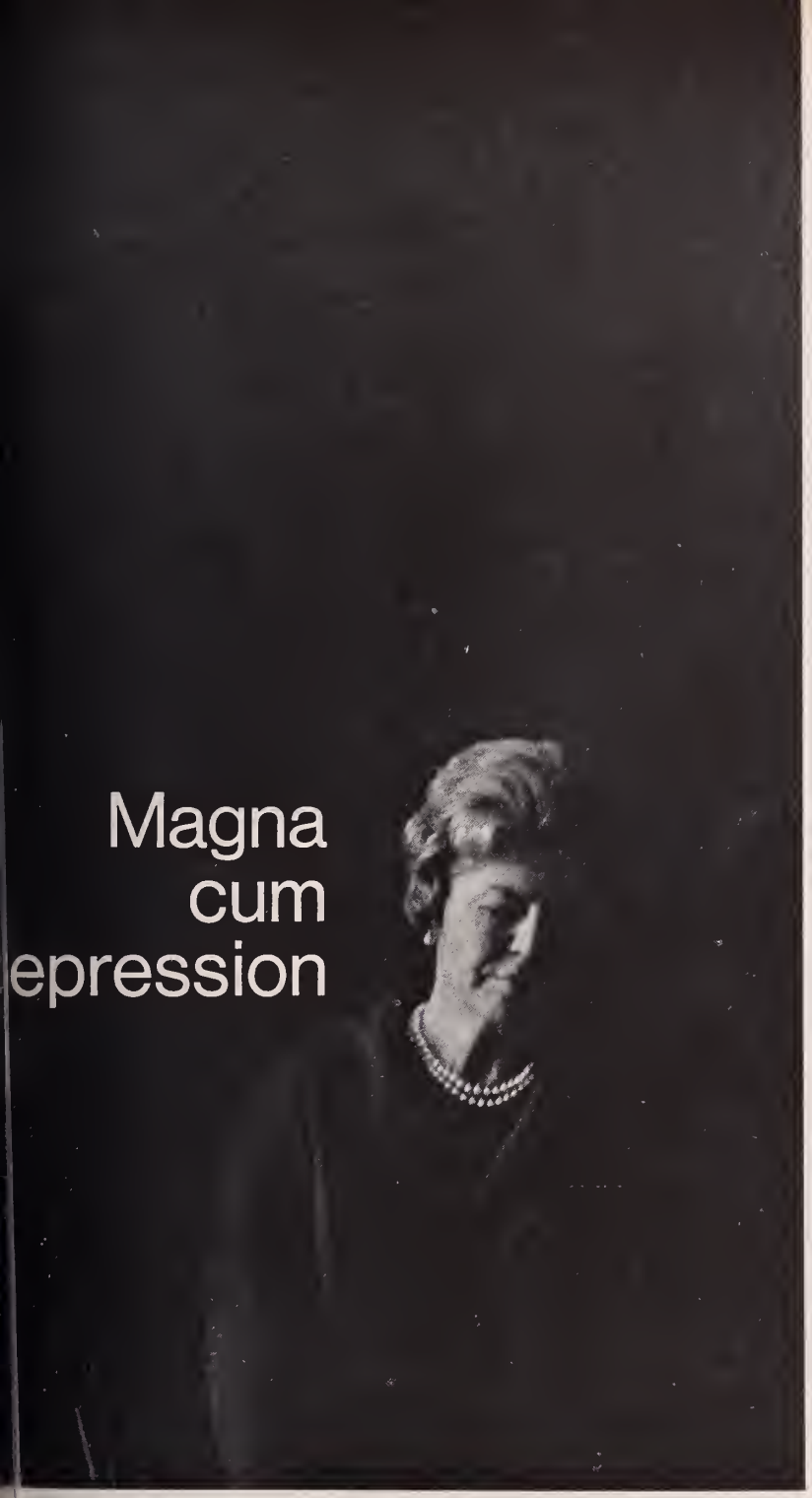
(Continued on Page 845)

†*This article was prepared by Victor B. Fuqua, M.P.H., formerly a Health Planner with the Kentucky Department of Health, now Deputy Director, Office of Comprehensive Health Planning, 275 East Main Street, Frankfort, Kentucky 40601*



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Report of a Family with Hereditary Hemorrhagic Telangiectasia in Western Kentucky†

TIMOTHY G. FLEMING, M.D.* AND SALLY J. FLEMING, M.D.**
Madison, Wisconsin

The history, pathophysiology and clinical symtomatology of hereditary hemorrhagic telangiectasia (Osler-Rendu-Weber disease) are reviewed. A pedigree of a large Western Kentucky family in which 45 cases have been identified is presented. Only three members of the family are known to have been previously diagnosed as having the disorder.

A large family with hereditary hemorrhagic telangiectasia (Osler-Rendu-Weber disease) has been found in Western Kentucky. This disease is an inherited vascular anomaly characterized by multiple dilations of capillaries and venules of the skin and mucous membranes.

Historically, Babington[1] in 1865 was the first to describe familial epistaxis. In 1896 Rendu[17] associated telangiectasia with familial epistaxis and distinguished the disease from hereditary hemophilias on clinical grounds. Five years later Osler[16] gave the first complete clinical description based on three families, one of them from Eastern Kentucky. Weber[24] in 1907 emphasized that this was a "congenital-developmental" disease manifesting itself in later life. In 1909 Hanes[10] presented the first histopathological description of the lesions complete with color plates.

Telangiectases are present but usually asymptomatic during childhood. They increase in number and size with age. Symptoms usually appear during puberty and sometimes increase in severity with age, although 10 percent of affected adults are asymptomatic. [3,19] By far the most common symptom is epistaxis which occurs in about 90 percent of cases. Other common sites of hemorrhage and their approximate frequency include: lips and mouth, 20 percent; gastrointestinal tract, 15 to 20 percent; urinary tract, five to 10 percent; respiratory system, less than five percent. However, bleeding has been reported from virtually every site imaginable.[3,19,21] In the majority of cases hemorrhages are only a persistant annoyance to both patient and physician and not a threat to life; two to four percent of cases do eventually die of hemorrhage.[3,6,11]

The lesions consist of endothelial-lined lakes served by an arteriole and a venule and covered by an unusually thin layer of epithelium. They are relatively incapable of hemostatic contraction following injury.[12] Therefore cessation

†*This study was conducted by the authors as senior medical students at the University of Kentucky College of Medicine during their six-week clerkship with the department of community medicine this year.*

* ** *Interns, University of Wisconsin Hospitals, Madison, Wisconsin*

of bleeding is more dependent upon plasma clotting factors which were considered to be present in normal concentrations and capable of normal hemostatic function until Muckle[14] in 1964 reported relatively low in vivo platelet adhesiveness in 18 out of 19 symptomatic cases. Three asymptomatic cases had normal platelet adhesiveness. (The author unfortunately did not say whether his cases were related.) Bleeding is provoked by mild and usually unrecognized trauma to the thin walled lesions or by an increase in blood pressure at the level of the lesions as is produced by stooping or straining.

Telangiectases occur most often on the skin of the face and on the mucous membranes of the nose and mouth. However, they may be present anywhere on the body or underlying the epithelium of any hollow viscus. In addition, vascular malformations of various sizes have been found in many solid organs. During the past 20 years there has been increasing recognition of pulmonary vascular anomalies variously described as hemangiomas, fistulas, or aneurysms. Hodgson[9] estimates that about 50 percent of pulmonary arteriovenous fistulas are associated with hereditary hemorrhagic telangiectasia. Among individuals known to have hereditary hemorrhagic telangiectasia, six to 10 percent have pulmonary arteriovenous fistulas.[8,21] Complications include polycythemia, heart failure, brain abscess and hemothorax. Of all the lesions associated with this disease, pulmonary arteriovenous fistulas are the most amenable to successful surgical correction.

During the past five years there have been several reports of systemic arteriovenous fistulas involving the hepatic, cerebral and retinal vessels.[4,5,13] How often such lesions occur has yet to be determined. Aneurysms of the hepatic artery,[2] splenic artery,[18] and aortic arch [15,22] have been reported in cases of hereditary hemorrhagic telangiectasia, but the rarity of such reports suggests that there is no more than a chance relationship. Idiopathic cirrhosis of the liver in conjunction with hepatic vascular malformations has been reported frequently by European authors.[13,23]

Methods of treatment include surgery, hormones, radiotherapy, and general medical support. With the exception of excision of pulmonary arteriovenous fistulas, surgical treatment of the hemorrhagic lesions has been generally unsuccessful. Resection of segments of bowel is usually followed by the development of hemorrhagic lesions in previously unaffected segments. Likewise, plastic procedures of the nasal mucosa have yielded temporary relief until the appearance of new hemorrhagic areas. Electrocautery of the nasal lesions has given short term relief (one to three months) of symptoms in 50 percent of cases. External irradiation and radium implants are of no proven value. Estrogens have given long term relief (greater than three months) in about 65 percent of cases.[21] Anemia is treated with iron and transfusions when needed. Pressure to the site of bleeding is the best means of achieving hemostasis.

The trait is transmitted as an autosomal dominant. Reports of large numbers of cases show an approximately equal distribution between the sexes, and very rarely are generations skipped. It has been suggested that the homozygous state is lethal in early childhood, although only one such case has been reported.[20] Tunte[23] in 1964 gave an estimated gene frequency of one or two in 100,000; his estimate of the mutation rate was 2×10^{-6} to 3×10^{-6}. In Stecker's[21] review of 102 cases which were treated at the Mayo Clinic, 10 percent did not give a family history of the disorder. Numerous large families with this disease have been reported from many parts of the world.

Materials and Methods

The index case was diagnosed incidently during a physical examination for disability pension. He was unavailable at the time of this investigation, but his family provided a wealth of information about relatives. All family members living reasonably close to the center of the study (Madisonville) who could be found were visited. Personal and family histories were taken, and persons suspected of having the disorder were examined for objective evidence. Thorough examinations for occult manifestations were, unfortunately, not feasible. States to which family members have migrated include Tennessee, Indiana, Illinois, North Carolina, Michigan and North Dakota. Although some of these people are considered positive cases, no attempt was made to locate them.

Expanding the pedigree to learn what other family names might be involved with the dis-

order proved difficult due to the fact that births and deaths were not recorded in the area until 1911 and marriage licenses date only to 1830. Reporting of this data was inconsistent in earlier years. Tombstones in small church or family cemeteries often were the most reliable sources of information.

Cases were accepted if either of the following two criteria were met:

1) multiple telangiectases on examination of the face, lips, oral mucosa, or tongue

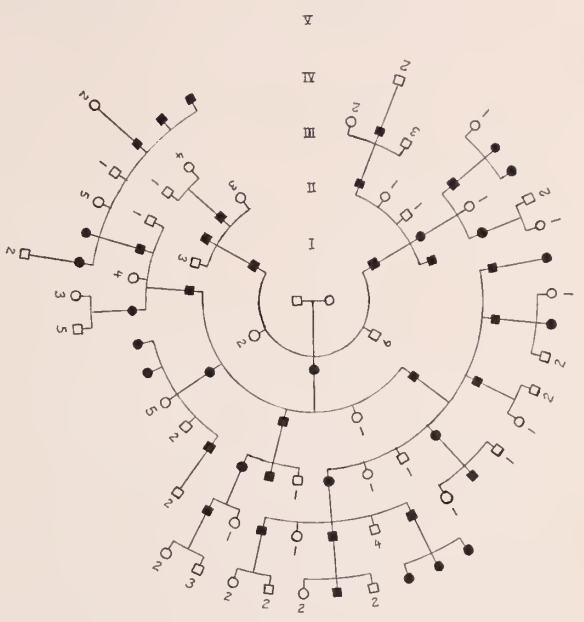
2) positive histories from at least two reliable family members who knew the person well; the history had to include facial telangiectases and recurrent spontaneous epistaxis beginning in late childhood and continuing throughout the person's life.

Persons in the first generation with positive histories but without descendants having the disease were not counted as positives on the basis of insufficient information. Histories of the first generation were obtained from elderly persons who were relying on childhood memories of these people.

Results

There were 45 cases of hereditary hemorrhagic telangiectasia identified of which 28 are living. The 45 cases represent 31.9 percent of the 141 members of the affected sibships. The pedigree (Figure I) is typical of autosomal dominant inheritance. As Table I shows, the percent of affected members in a sibship varies in the five generations. Only 27 percent of persons in the first generation, a sibship of 11, are considered positive. Within this sibship several people died too early to be remembered by current octogenarians and have no descendants in recent generations. In the second generation, 50 percent of individuals were found to have the disorder. In the three most recent generations the percentage declines, perhaps because people have moved away and are not known well while others are too young to show the trait if they do have it. It must also be remembered that there is considerable variation in the expression of this disorder so that in occasional cases epistaxis and/or facial telangiectases may be absent. In this study two persons were found who were unaware of their involvement but who had numerous asymptomatic telangiectases of the lips, oral mucosa and tongue. Both of these people had only occasional and mild epistaxis.

FIGURE I



Pedigree of a family with hereditary hemorrhagic telangiectasia showing five affected generations

■ Affected male ● Affected female

□ 2 Two unaffected males in the sibship

Thirty-four and seven-tenths percent of the 75 males and 28.8 percent of the 66 females were affected. This is in accordance with the fact that males in general are more symptomatic.

Symptoms of the 45 cases included epistaxis of widely varying frequency and severity, facial markings, bleeding from the lips while eating, headaches relieved by epistaxis, dyspnea and gastrointestinal bleeding. Interestingly, the history of headaches relieved by epistaxis was quite common. One man had had a pulmonary arteriovenous fistula removed (without the diagnosis of hereditary hemorrhagic telangiectasia being made) followed by relief of dyspnea. Two others were found to have clubbing, polycythemia and dyspnea. One man who has moved from Kentucky is known to have undergone several skin grafting procedures to stop epistaxis. A woman who died while the study was in progress had multiple hemorrhagic arteriovenous malformations of the gastrointestinal tract. Only three of the

TABLE I

Generation	Males	Affected males	Females	Affected females	Total	Total Affected	%
I	8	2	3	1	11	3	27.3
II	11	7	7	2	18	9	50.0
III	17	8	24	7	41	15	36.6
IV	29	8	21	6	50	14	28.0
V	10	1	11	3	21	4	19.5
Total	75	26 (34.7%)	66	19 (28.8%)	141	45	31.9

45 cases are known to have been previously diagnosed as having hereditary hemorrhagic telangiectasia.

No evidence of a homozygote was found. According to the lone report of a homozygote, such evidence would consist of multiple hemangiomas present at birth and progressive hemangiomatosis leading to death in infancy or early childhood.

The origin of the gene in Todd County was not learned. The earliest generation in which positive cases were identified was a sibship born around the 1850's in which three of 11 sibs had the disease. The maiden name of the mother of this sibship is unknown. Early deeds, names of witnesses on marriage records and family history indicate that the father was one of four brothers whose father came to Todd County in the early 1800's. The numerous descendants of the other three brothers do not have the trait. Therefore we suspect the mother of this sibship of 11 as being the carrier, although we cannot count her as a positive case. As the years and generations passed, the families gradually migrated from the farms to the mines and then to the industrial urban areas. Of the 28 living cases, none are now living in Todd County.

Acknowledgements

This study was accomplished under the helpful guidance of Dan A. Martin, M.D., field faculty advisor. We are also indebted to Doctor Ian Shine, population geneticist at the College of Medicine, for his constructive criticisms.

Bibliography

1. Babington, B. G.: Hereditary epistaxis, *Lancet* 2:362, 1865.
2. Bean, W. B.: Hereditary hemorrhagic telangiectasia: 'Osler's disease' in "Vascular spiders and related lesions of the skin", pp. 132-157 Charles C. Thomas Publisher, Springfield, Ill., 1958.
3. Bird, R. M. et al.: A family reunion: a study of hereditary hemorrhagic telangiectasia, *New Eng J Med* 257:105, 1957.
4. Chandler, D.: Pulmonary and cerebral arteriovenous fistula with Osler's disease, *Arch Int Med* 116:277, 1965.
5. Childers, R. W. et al.: Intrahepatic arteriovenous fistula with a pulmonary vascular obstruction in Osler-Weber-Rendu disease, *Amer J Med* 43(2):304, 1967.
6. Dolowitz, D. A.: Hereditary hemorrhagic telangiectasia, *Amer Surgeon* 19:776, 1953.
7. Giampalma, A.: Arteriovenous angiomatosis of the lung with hypoxemia, *Acta Med Scand* supplement 248:1, 1950.
8. Hodgson, C. H. et al.: Hereditary hemorrhagic telangiectasia and pulmonary arteriovenous fistula: summary of a large family, *New Eng J Med* 261:625, 1959.
9. Hodgson, C. H. and Kaye, R. L.: Pulmonary arteriovenous fistula and hereditary hemorrhagic telangiectasia: review of 35 cases of fistula, *Dis Chest* 43:449, 1963.
10. Hanes, F. M.: Multiple hereditary telangiectases causing hemorrhage (hereditary hemorrhagic telangiectasia), *Bull Hopkins Hosp* 20:63, 1909.
11. Houser, K. M.: Hereditary hemorrhagic telangiectasia, *Ann Otol* 43:731, 1934.
12. Macfarlane, R. G.: Critical review: the mechanism of haemostasis, *Quart J Med* 10:1, 1941.
13. Martini, G. A.: Lebercirrhose bei Morbus Osler, cirrhosis hepatis teleangiectatica, *Gastroenterologia* (Basel) 83:157, 1955.
14. Muckle, T. J.: Low in-vivo adhesive-platelet count in hereditary hemorrhagic telangiectasia, *Lancet* 2:880, 1964.
15. Muggia, F.M.: Osler's disease with an aortic arch aneurysm, *Arch Intern Med* 114:307, 1964.
16. Osler, W.: On a family form of recurring epistaxis, associated with multiple telangiectases of the skin and mucous membranes, *Bull Hopkins Hosp* 12:333, 1901.
17. Rendu, M.: Epistaxis repetees: chez un suject porteur de petits angiomes cutanes et muqueux, *Bull Soc Med Hop Paris* 13: 731, 1896.
18. Schuster, N. H.: Familial hemorrhagic telangiectasia associated with multiple aneurysms of the splenic artery, *J Path Bact* 44:29, 1937.
19. Smith, C. R. Jr.; Bartholomew, L. G.; and Cain, J. C.: Hereditary hemorrhagic telangiectasia and gastrointestinal hemorrhage, *Gastroenterology* 44:1, 1963.
20. Snyder, L. H. and Doan, C. A.: Is the homozygous form of multiple telangiectasia lethal?, *J Lab and Clin Med* 29 (12):1211, 1944.
21. Stecker, R. H. et al.: Hereditary hemmorrhagic telangiectasia; a review of 102 cases and presentation of an innovation to septodermatoplasty, *Arch Otolaryng* (Chicago) 82:522, 1965.
22. Thomas, J. R.: Osler's disease with a dissecting aneurysm of the aorta, *Arch Intern Med* 116:448, 1965.
23. Tunte, W.: Klinik und Genetik der Oslerschen Krankheit, *Zeitschrift fur Menschliche Vererbungs - und Konstitutionslehre* 37:221, 1964.
24. Weber, F. P.: Multiple hereditary developmental angiomata (telangiectases) of the skin and mucous membranes associated with recurring hemorrhages, *Lancet* 2:160, 1907.

Meningococcemia and Intravascular Clotting: The Use of Heparin in Management†

PHILLIP HOLLAND, M.D.,* MARY FRANCES BOBO,** AND ELLEN SHACKELFORD***

Lexington, Kentucky

Intravascular coagulation and severe hemorrhagic diathesis secondary to meningococcal endotoxin is discussed. The efficacy of heparin therapy in this clinical situation is documented.

GENERALIZED intravascular clotting may lead to depletion of several coagulation factors and result in transformation of circulating plasma to serum with an accompanying severe hemorrhagic diathesis.[1] This disorder has been termed "defibrination syndrome" or "consumption coagulopathy" and has been reported to occur in a variety of clinical conditions,[2] one of which is septicemia.[3-9]

Heparin therapy, although its use appears paradoxical, has recently been suggested as a therapeutic method to stop further intravascular coagulation and consumption of the already depleted clotting factors.[1] This report presents the results of coagulation studies performed in four patients with meningococcemia and describes the dramatic response to heparin in one patient with fulminant meningococcemia and consumption coagulopathy.

Patient Material

CASE 1

G. W., a seven year old white male, was first seen at the University of Kentucky Medical Center (U.K.M.C.) on January 10, 1968. Sore throat, vomiting and chills began abruptly 18 hours prior to admission. A purpuric rash was noted 12 hours later, at which time he was seen by his local physician, given one gram of intramuscular polycillin and referred to the U.K.M.C. On admission the temperature was 105°F, blood pressure was unobtainable and extensive purpuric eruptions were present on the extremities. Fulminant meningococcemia was evident and therapy for shock was instituted with intravenous Ringers lactate and Dextran. Penicillin and SoluCortef were given intravenously following cultures of the nasopharynx, purpuric lesions and cerebral spinal fluid. The initial hemoglobin was 13.2 Gm.% and the hematocrit was 42%.

Approximately three hours after starting intravenous fluids a blood pressure of 90/56 was obtained. Six hours after admission the patient vomited coffee ground material and profuse guaiac positive diarrhea began. A repeat hemoglobin was 8.8 Gm.%; hematocrit, 28% and the patient was transfused with 250 ml. of whole blood. Gastrointestinal hemorrhage continued and bleeding was noted around the intravenous site. Coagulation studies were obtained and the results are as follows: Clotting time, 30 minutes (normal six - 12 minutes); platelet count, 25,000/cu. mm. (normal 150,000 - 400,000/cu. mm.); prothrombin time, 30 seconds (normal 12 - 14 seconds); partial thromboplastin test, 215 seconds (normal 35 - 50 seconds) and fibrinogen, 145 mg.% (normal 150 - 350 mg.%). Thrombocytopenia, hypofibrinogenemia, prolonged partial thromboplastin time (PTT) and prothrombin time documented the diffuse intravascular clotting and intravenous heparin (100 units/kg. every six hours) was given.

Significant improvement in the fibrinogen level and PTT was noted within 36 hours and

†*This study was supported by Grant # T-439, Kentucky Division of American Cancer Society*

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the heparin was discontinued. Results of serial coagulation studies are shown in Figure 1.

The initial throat culture was subsequently positive for *Neisseria meningitidis,* group B. Fibrinoid necrosis of arterioles, vessel fibrin thrombi and gram negative diplococci in endothelial cells were observed in a skin biopsy taken on the second hospital day.

The patient was subsequently discharged and no skin grafts were required in the necrotic areas.

CASE 2

J. W., a five year old white male, was admitted to the U.K.M.C. on January 24, 1968 because of fever, vomiting and headache. Symptoms began 12 hours prior to admission and enroute to the hospital petechiae appeared on the trunk and lower extremities.

Initial examination revealed an acutely ill child with nuchal rigidity and a generalized petechial rash. Blood pressure was normal and rectal temperature was 100.4°F. Lumbar puncture was performed and the results are as follows: cell count, 140 white blood cells/cu. mm. with 87% neutrophils; sugar, 80 mg.% and protein, 10 mg.%. Gram negative diplococci were observed in the spinal fluid smear and subsequent cultures were positive for *Neisseria meningitidis,* group B. The child was treated with intravenous penicillin.



FIGURE 1. Results of coagulation studies in relation to heparin administration (Case 1).

Results of the initial coagulation studies include the following: platelet count, 180,000/cu. mm.; fibrinogen, 295 mg.%; prothrombin time, 16 seconds and PTT, 71 seconds. Eight hours later the coagulation studies were repeated and the results include the following: platelet count, 180,000/cu. mm.; fibrinogen, 390 mg.%; prothrombin time, 18 seconds and PTT, 95 seconds. An increase in the PTT and prothrombin time in the eight hours following hospitalization indicated the onset of intravascular coagulation and it was elected to treat this child with heparin in order to prevent further consumption of clotting factors. He received 100 units/kg intravenously every six hours. Results of the coagulation studies 24 hours after starting heparin are as follows: platelet count, 157,000/cu. mm.; fibrinogen, 550 mg.%; prothrombin time, 12 seconds and PTT, 42 seconds. Heparin therapy was discontinued after 36 hours. Subsequent coagulation studies were also within normal limits. The hospital course was uneventful and he was discharged six days after admission.

CASE 3

P. C., a 12 year old white male, was admitted to the U.K.M.C. on February 11, 1968. Complaints of leg, stomach and back pain began 36 hours prior to admission. Projectile vomiting was noted the evening after onset of symptoms and on the morning of admission the patient became delirious and semi-comatose.

Initial physical examination revealed an acutely ill, combative child with a rectal temperature of 101°F. Blood pressure was normal; pulse was 160/minute; and respirations were 24/minute. A fine nonconfluent petechial rash was present on the trunk and lower extremities. Results of initial lumbar puncture are as follows: cell count, 29,000 white blood cells/cu. mm. with 91% neutrophils, protein, 460 mg.% and glucose, 10 mg.%. Intracellular and extracellular gram negative diplococci were observed in the cerebral spinal fluid smear. The child was treated with intravenous penicillin and the subsequent culture of the cerebral spinal fluid was positive for *Neisseria meningitidis,* group B.

Results of the initial coagulation studies include: platelet count, 227,500/cu. mm.; fibri-

nogen, 690 mg.%; prothrombin time, 15 seconds and PTT, 67 seconds. The coagulation studies were repeated 12 hours later and the results were within normal limits. No evidence of consumption coagulopathy was demonstrated and heparin therapy was not given. Two subsequent coagulation studies performed during the patient's hospitalization were also within normal limits. The patient became coherent and afebrile on the third hospital day and was discharged on the seventh hospital day.

CASE 4

R. B., a five year old white female, was admitted to the U.K.M.C. on March 14, 1968. The day prior to admission the child complained of sore throat and fever and became increasingly irritable in the evening. On the morning of admission she was seen by her local physician at which time her temperature was 103°F. and a generalized petechial rash was noted. She was treated with two million units of intravenous penicillin and referred to the U.K.M.C.

Physical examination on admission revealed an acutely ill, incoherent child with a rectal temperature of 102.6°F. Initial blood pressure was normal, pulse was 100/minute and respiration, 16/minute. A lumbar puncture was performed and the results are as follows: cell count, 32,250 white blood cells/cu. mm. with 96% neutrophils; protein, 460 mg.% and glucose, 10 mg.%. Occasional intracellular gram negative diplococci were noted in the cerebral spinal fluid smear. Intravenous penicillin was given.

Initial coagulation studies are as follows: platelet count, 207,500/cu. mm.; fibrinogen, 400 mg.%; prothrombin time, 17.3 seconds and PTT, 67 seconds. No clinical bleeding was present. Coagulation studies repeated 24 hours later included a platelet count of 195,000/cu. mm.; fibrinogen, 530 mg.%; prothrombin time, 15 seconds and PTT, 65 seconds. Heparin therapy was not administered in this child. Results of coagulation studies repeated on the third hospital day were within normal limits. The patient's subsequent hospital course was uneventful and she was discharged after five days of penicillin therapy.

Discussion

The hemorrhagic diathesis observed in fulminant meningococcemia, as illustrated by Case 1, is the result of acute activation of the intravascular clotting process. Administration of intravenous endotoxin in dogs is followed by a rapid decrease in factor I (fibrinogen), factor II (prothrombin), factor V, (proaccelerin) and factor VIII (antihemophilic factor) as well as a significant depression of circulating platelets.[10] Identical results, indicative of consumption of these clotting factors during intravascular coagulation, have been recorded in humans with sepsis due to *Escherichia coli*,[9] meningococcus,[3-5] *Pseudomonas*,[7] and in patients with Rocky Mountain Spotted Fever.[8] Confirmation of the suspicion that this process is occurring in a critically ill patient may be obtained by examining the peripheral blood smear for platelets or obtaining a platelet count, measuring the fibrinogen level and performing a PTT and routine prothrombin time. Thrombocytopenia, hypofibrinogenemia and a prolonged PTT will identify a generalized intravascular clotting phenomenon. No single coagulation test can document this complication.

Of the four patients with meningococcemia in this report, one had clearcut evidence of intravascular coagulation, one was equivocal, while in the two milder cases no coagulopathy was demonstrable. In the patient who presented with profound shock a severe consumption coagulopathy was also present. All of the patients with shock secondary to meningococcal endotoxin in the series of McGehee et al.[3] had extensive intravascular coagulopathy. Thus, a frequent association between intravascular coagulation and endotoxin shock appears to exist. The coagulation studies (prolonged PTT and prothrombin time) in Case 2 indicate a mild consumption of clotting factors but without severe thrombocytopenia or significant hypofibrinogenemia. Cases 3 and 4 illustrate that meningococcemia in a milder form may exist without consumption of coagulation factors. These findings suggest that appropriate screening studies for the presence of intravascular clotting should be obtained in all cases of meningococcemia.

When intravascular coagulation has been triggered by an endotoxin and depletion of clotting factors is taking place, the use of an anticoagulant to reverse the process appears the therapy of choice. Favorable results following heparin administration have been previously reported[1,3] and the rapid return to normal

of coagulation studies in Cases 1 and 2 in this report indicate that heparin is indicated in this clinical situation and may be life saving. Heparin was given intravenously in a dose of 100 units/kg. every six hours for 36 hours at which time it was discontinued. Thus, intensive or prolonged heparin therapy is not a requirement in treating the intravascular coagulation associated with an endotoxin derived from an organism responsive to an antibiotic.

Summary

The clinical severity of infection due to meningococci is quite varied. Fulminant meningococcal endotoxemia may be accompanied by diffuse intravascular clotting and result in a severe hemorrhagic diathesis. Thrombocytopenia, hypofibrinogenemia and a prolonged PTT or prothrombin time indicate the presence of active intravascular coagulation. Heparin therapy appears beneficial in reversing the depletion of consumable clotting factors in this clinical situation.

References

1. Rodriquez-Erdmann, F.: Bleeding due to Increased Intravascular Blood Coagulation. Hemorrhagic Syndromes Caused by Consumption of Blood - Clotting Factors (Consumption-Coagulopathies). *New Eng. J. Med.* 273:1370, 1965.
2. McKay, D. G.: *Disseminated Intravascular Coagulation.* Harper & Row, New York, 1965.
3. McGehee, W. G., Rapaport, S. I., Hjort, P. F.: Intravascular Coagulation in Fulminant Meningococcemia. *Ann. Int. Med.* 67:250, 1967.
4. Abildgaard, C. F., Corrigan, J. J., Seeler, R. A., Simone, J. V., Schulman, I.: Meningococcemia Associated with Intravascular Coagulation. *Pediat.* 40:78, 1967.
5. Wilhelm, D. J., and Cherubin, C.: Hypofibrinogenemia and Thrombocytopenia with Meningococcemia. *Amer. J. Dis. Child.* 113:494, 1967.
6. Dennis, L. H., Eichelberger, J. W., Inman, M. M., Conrad, M. E.: Depletion of Coagulation Factors in Drug - Resistant Plasmodium Falciparum Malaria. *Blood* 29:713, 1967.
7. Rapaport, S. I., Tatter, D., Coeur-Barron, N., Hjort, P. F.: Pseudomonas Septicemia with Intravascular Clotting Leading to the Generalized Shwartzman Reaction. *New Eng. J. Med.* 271:80, 1964.
8. Trigg, J.W.: Hypofibrinogenemia in Rocky Mountain Spotted Fever. *New Eng. J. Med.* 270: 1042, 1964.
9. Conley, C. L., Ratnoff, O. D., Hartmann, R. C.: Studies in Afibrinogenemia: I Afibrinogenemia in Patient with Septic Abortion, Acute Yellow Atrophy of Liver and Bacteremia due to E. Coli. *Bull. Hopkins Hosp.* 88:402, 1959.
10. Hardaway, R. M.: *Syndromes of Disseminated Intravascular Coagulation.* Charles C. Thomas, Springfield, 1966, p. 65.

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Splenic Artery Aneurysm
Brief Review with Two Case Reports†

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Antemortem diagnosis of aneurysm of the splenic artery is uncommon[9] but important because surgical removal protects the patient from the grave prognosis of rupture. The following illustrative cases were surgically treated at the University of Kentucky Medical Center.

Case Reports

CASE 1

A 33-year-old mother of seven entered the hospital for diagnostic screening as a potential kidney donor. Past medical history and physical examination were completely negative. An abdominal aortogram, performed to evaluate the renal blood supply, demonstrated a calcified splenic artery aneurysm 1 cm in diameter (Figure 1). Two months later, the splenic artery aneurysm and spleen were resected. The pathologist confirmed the preoperative diagnosis of arteriosclerotic aneurysm of the splenic artery. The patient's postoperative course was benign.

CASE 2

A 53-year-old white female, gravida 9, para 8, was admitted with a diagnosis of uterine prolapse and complaints of urinary frequency, nocturia, urgency, dysuria and stress incontinence. Past history was not significant except for multiple pregnancies. Physical examination was negative except for prolapse of the uterus and a large cystocele. A roentgenogram of the abdomen showed a ring of calcific density 3 cm in diameter in the left upper quadrant having the typical signet ring appearance of a splenic artery aneurysm (Figure 2). Surgical excision of the aneurysm and spleen was performed. The aneurysm was located 2.5 cm proximal to the splenic hilum and measured 2.5 cm in diameter. There were microscopic arteriosclerotic changes and calcification in the wall of the aneurysm. The postoperative course was benign.

Comments

HISTORY

Splenic artery aneurysm was first described by Beoussier in 1870[5], from injection studies of a 60-year-old female cadaver. In 1881, President James A. Garfield died from rupture of a splenic artery aneurysm which developed secondary to trauma inflicted by the assassin's bullet. In 1903, Winkler[5] first described a splenic aneurysm in a living patient. The first preoperative diagnosis followed by surgical removal was reported by Hegler in 1920[5].

INCIDENCE

The splenic artery is second only to the aorta as a site of abdominal aneurysms[1]. The reported incidence in autopsy material varies from 0.038%[9] to 10.4%[4]. The higher figure was found in a study of geriatric patients[4]. Splenic artery aneurysms are reported to occur four times more frequently in females than in males[7]. This ratio is reversed for aneurysms in general. Most cases occur between the ages of 50 and 80 years. Twenty-one percent of these patients have additional aneurysms elsewhere[6].

ETIOLOGY

Owens and Coffey[9] enumerate the following etiologies: arteriosclerosis, embolus, congenital defects, trauma, infection, portal hypertension and pregnancy. The vast majority of cases are secondary to arteriosclerotic degeneration of the splenic arterial wall. The fre-

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FIGURE 1. Late phase arteriogram shows filled splenic artery aneurysm.



FIGURE 2. Note calcific ring of splenic artery aneurysm in left upper quadrant.

quent relationship between pregnancy and rupture of a splenic artery aneurysm is not well understood but it is thought that the increased intra-abdominal pressure puts additional tension on the weakened arterial wall precipitating rupture[6].

PATHOLOGY

In most cases, the aneurysm is located in the main trunk of the splenic artery although approximately one-third occurs in the second division of the artery. The microscopic findings reflect the underlying etiology. In most cases, the changes are arteriosclerotic and degenerative in nature[9].

CLINICAL MANIFESTATIONS

Although splenic artery aneurysms may produce mild distress in the upper abdomen, they are usually asymptomatic prior to rupture. After rupture, the pain usually is severe and may be either diffuse or localized to the epigastrium or left upper quadrant[9]. There may be associated nausea or vomiting. Weakness, dyspnea and shock follow rupture.

The rupture may occur in two stages, being seen in approximately 21 percent of cases with this complication[9]. In this sequence of events, the initial rupture occurs into the lesser peritoneal sac, producing either pain in the upper abdomen, shock, or both, and signs of peritoneal irritation. Clotting occurs rapidly in the limited space temporarily delaying further hemorrhage and leading to transient improvement in the patient's general condition. During this period, diagnosis and surgical treatment is lifesaving. A second, often fatal, hemorrhage usually follows. The second rupture generally extends into the greater peritoneal cavity, although occasionally the stomach or colonic wall is breached. Secondary hemorrhage usually develops within 48 hours after the initial rupture[5], although the latent period has varied from six hours to 55 days[3].

Splenic artery aneurysm should be considered very carefully during pregnancy if vague symptoms are present in the upper abdomen. Schug and Rankin[8] report that a splenic artery aneurysm in gravid females is usually found in multiparous women during the third trimester of an otherwise uneventful pregnancy. They report seven ruptures during labor. Owens and Coffey[9] found that 31 patients, or 24 percent of their female patients with splenic artery aneurysms, were pregnant at the time of diagnosis. The diagnosis was made in every instance following rupture of the aneurysm. Rupture usually occurred during the

third trimester. The conditions most likely to be mistaken for splenic artery aneurysm during pregnancy are abruptio placenta, ruptured uterus, or hemorrhage from an abdominal pregnancy. Recurrence of a second episode of shock after a period of improvement, increasing abdominal distension with signs of free fluid or formation of palpable tumor in the epigastrium are particularly suggestive of a ruptured splenic artery aneurysm. Rupture during the last trimester frequently necessitates a rapid caesarean section to permit visualization and excision of the aneurysm[8]. When rupture occurs in pregnancy, the maternal mortality is reported to be 80 percent with a somewhat higher fetal mortality[8].

DIAGNOSIS

Although a splenic artery aneurysm may be suspected when there is pain in the upper abdomen, a palpable and occasionally pulsatile tumor in the left upper quadrant, and a systolic bruit, in most instances the diagnosis is first considered following discovery of a characteristic ring of calcification in the region of the splenic artery on a roentgen examination. The roentgen abnormality was the only finding suggesting the diagnosis in 14 of 19 cases reported from the Mayo Clinic[6]. In only two of these cases was the aneurysm not calcified. Calcification of this nature is often discovered incidentally on roentgenograms of the abdomen. Rather extensive calcification of the splenic artery without an area of local aneurysmal formation is extremely common and of no consequence. The calcification of an aneurysm characteristically shows a small area of discontinuity where the aneurysm communicates with the arterial wall. In some cases, this lack of continuity may not be seen due to the incidence of x-ray beam relative to location of the aneurysm on the arterial wall. Laminagraphy is helpful in showing the loss of continuity of the calcification in these cases[10]. Although aneurysm of the splenic artery can be strongly suspected from the characteristic calcification, especially if it inscribes an area larger than a normal splenic artery, a positive preoperative diagnosis may require verification by aortography. Selective angiography of the splenic artery is not recommended as a sole procedure because other coexistent aneurysms may be overlooked unless the entire abdominal arterial distribution is visualized[6]. Aortography localizes the lesion and differentiates it from calcification in the wall of a tortuous splenic artery without aneurysm, aneurysm of the renal artery, and calcified cysts of the spleen, kidney or adrenal gland. Fluoroscopy may show a pulsatile filling defect in the posterior wall of the stomach[2].

TREATMENT

If there are no contraindications, surgical removal is indicated prior to rupture since mortality after rupture exceeds 75 percent[2]. Since these lesions are often discovered in elderly individuals, the implications of the surgical procedure must be considered in relationship to the general condition of the patient, his symptomatology and the likelihood of rupture[11]. Von Ronnen[10] does not recommend surgery if the aneurysm is small (size of a cherry or smaller), asymptomatic, shows a completely calcified wall except for the loss of continuity where it communicates with the artery, is not associated with severe hypertension and is not present in a female of the childbearing age[10].

Summary

Two cases of aneurysm of the splenic artery are reported. Both occurred in females and were surgically excised. The literature on this subject is briefly reviewed. The lesion usually presents characteristic roentgen findings of a calcific ring density in the left upper quadrant of the abdomen. Because of the high mortality associated with rupture of these aneurysms, surgical excision should be seriously considered.

Bibliography

1. Heggtveit, H. A.: "Rupture of an Aneurysm of the Splenic Artery: An Unusual Cause of Massive Gastric Hemorrhage", *Canadian Medical Association Journal* 88:1290-1294, June 1963.
2. Yang, J.; Spinuzza, S. J. and Gilchrist, R. K.: "Aneurysm of Splenic Artery with Calcification", *Archives of Surgery* 87: 676-681, October 1965.
3. Furler, I.K.; Robertson, D. N. S.; Harris, H. J. and Pryer, R. R. L.: "Spontaneous Rupture of the Splenic Artery in Pregnancy", *The Lancet* 2:588-590, September 1962.
4. Bedford, P. D. and Lodge, B.: "Aneurysm of the Splenic Artery", *Gut* 1:312-320, December 1960.
5. Hogue, R. J.: "Splenic Artery Aneurysm: Report of a Case", *Journal of the Oklahoma State Medical Association* 54: 631-635, December 1961.
6. Spittel, J. A.; Fairbairn, J. F., II; Sheps, S. G.; Kincaid, O. W. and ReMine, W. H.: "Splenic Artery Aneurysm", *The Surgical Clinics of North America* 41:1121-1126, August 1961.
7. Moore, S. W. and Lewis, R. J.: "Splenic Artery Aneurysm", *Annals of Surgery* 153:1033-1046, June 1961.
8. Schug, J. and Rankin, R. P.: "Rupture of a Splenic Artery Aneurysm in Pregnancy", *Obstetrics and Gynecology* 25:717-723, May 1965.
9. Owens, J. C. and Coffey, R. J.: "Aneurysms of the Splenic Artery Including a Report of Six Additional Cases", *International Abstracts of Surgery* 97:313-335, October 1953.
10. Von Ronnen, J. R. "The Roentgen Diagnosis of Calcified Aneurysms of the Splenic and Renal Arteries", *Acta Radiologica* 39: 385-399, January-June 1953.
11. Ampel, L. L. and Keats, T. E.: "Aneurysms of the Splenic Artery", *Missouri Medicine 60:* 33-34, January 1963.

SPECIAL ARTICLES

Border Physicians May Be Subject To Fair Labor Standards Act†

LOCAL field agents for the Department of Labor are contending that employees of physicians, a substantial number of whose patients come from a neighboring state, may be engaged in interstate commerce to such a degree as to entitle them to be paid the federal minimum wage for 40 hours and time-and-a-half for any excess.

The Act applies only to enterprises having an annual gross volume of at least $500,000 ($250,000 beginning February 1, 1969) with at least two employees engaged in commerce, the production of goods for commerce or the handling, selling or otherwise working on goods which have already moved in or been produced for interstate commerce. Certain kinds of businesses are exempt, one of which is the "retail service establishment."

The agents apparently base their contention upon an Opinion-Letter of the Federal Wage-Hour Administrator dated January 11, 1968, in which he took the position that a physican's office is not exempt as a "retail service establishment" because, he said, "there has never been any concept of retail selling or servicing in the practice by doctors of their profession."

Our attorney is of the opinion (1) that physicians' offices are exempt as "retail service establishments" and (2) that even if they were not, the activities of their employees would have to have a closer connection with interstate commerce than the mere incidental "handling" of goods which have moved in interstate commerce, before their employment would be covered by the Act.

The Law Department of the AMA has researched the problem and finds no judicial support for the Wage-Hour Administrator's opinion that physicians' offices are not retail service establishments. The courts have held that race tracks, "investigative agencies," and rubbish collection services do not lack the retail service concept and the Department has administratively conceded that barber shops, beauty salons, masseur establishments, public baths, reducing establishments, shoeshine parlors and valet shops are retail service establishments. The AMA concludes that no distinction in principle can be drawn between these retail services and the professional services of the physician.

The Wage-Hour Administrator also interprets the Act as covering employees who regularly use channels of interstate *communication* (such as mail, telephone, teletype, telegraph) as a part of their duties. The AMA finds no judicial support for this interpretation except where (1) the employer is engaged in his primary business activity in several states; (2) the employer makes direct out-of-state purchases of goods which are delivered to him directly for resale to his local customers; (3) the employer, as a part of his primary business activity, regularly does business with persons in other states; (4) the employer is in the finance industry, the insurance industry, or his primary business activity is providing essential business services to companies engaged in interstate commerce or the manufacture of a substantial volume of products for interstate commerce.

Conversely, the courts have held that the use of channels of interstate communication as an incident to what is essentially a local business does not constitute interstate commerce.

Of course, some physicians, in addition to seeing substantial numbers of out-of-state patients, may make direct out-of-state purchases of drugs, and this could be troublesome, but only if physicians' offices are *not* exempt as

(Continued on Page 845)

†This article was prepared for The Journal by E. Gaines Davis, KMA Legal Counsel, at the request of the Board of Trustees



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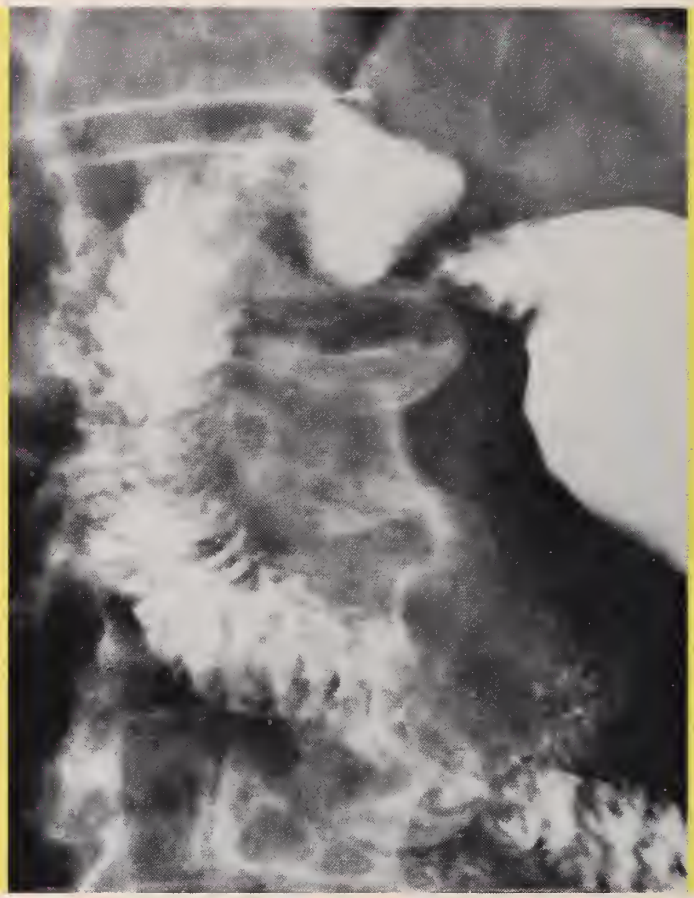
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(1) Bilbao, M. K.; Frische, L. H.; Rösch, J., and Dotter, C. T.: Hypotonic Duodenography, Scientific Exhibit, Radiological Society of North America, Chicago, Nov. 27–Dec. 2, 1966.

(2) Bilbao, M. K.; Frische, L. H.; Dotter, C. T., and Rösch, J.: Hypotonic Duodenography, Radiology 89:438-443 (Sept.) 1967.

See also: Liotta, D.: Pour le diagnostic des tumeurs du pancréas: La duodénographie hypotonique, Lyon chir. 50:445-460 (May-June) 1955.

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Warning: In renal impairment, since liver toxicity is possible, lower doses are indicated; during prolonged therapy consider serum level determinations. Photodynamic reaction to sunlight may occur in hypersensitive persons. Photosensitive individuals should avoid exposure; discontinue treatment if skin discomfort occurs.

Precautions: Drowsiness, anorexia, slight gastric distress can occur. In excessive drowsiness, consider longer dosage intervals. Persons on full dosage should not operate vehicles. Nonsusceptible organisms may overgrow; treat superinfection appropriately. Treat beta-hemolytic streptococcal infections at least 10 days to help prevent rheumatic fever or acute glomerulonephritis. Tetracycline may form a stable calcium complex in bone-forming tissue and may cause dental staining during tooth development (last half of pregnancy, neonatal period, infancy, early childhood).

Adverse Reactions: *Gastrointestinal*—anorexia, nausea, vomiting, diarrhea, stomatitis, glossitis, enterocolitis, pruritus ani. *Skin*—maculopapular and erythematous rashes; exfoliative dermatitis; photosensitivity; onycholysis, nail discoloration. *Kidney*—dose-related rise in BUN. *Hypersensitivity* reactions—urticaria, angioneurotic edema, anaphylaxis. *Intracranial*—bulging fontanels in young infants. *Teeth*—yellow-brown staining; enamel hypoplasia. *Blood*—anemia, thrombocytopenic purpura, neutropenia, eosinophilia. *Liver*—cholestasis at high dosage.

Upon adverse reaction, stop medication and treat appropriately.

Lederle

349-8



Come to the Meeting

EACH September brings a number of pleasant events to Kentucky. It marks the beginning of fall which is a beautiful season for this state. There is the parade of college students back to the campuses; the beginning of football season—and there is many an avid football fan in this basketball state. A pleasant occasion for the physicians is the Annual Meeting of the Kentucky Medical Association. It is pleasant because it is an opportunity to see old friends and to relax a few days in Louisville.

Of course, it is more than just a pleasant social occasion; it is an excellent meeting from the standpoint of medical education. The caliber of the Annual Meeting of KMA is such that all Kentucky physicians may take pride in it. In recent years, a very good percentage of the state's physicians attend all or part of this meeting.

Again this year the program is an excellent one and the editors of *The Journal* welcome the state's physicians to the annual event. We also welcome the wives, medical students, nurses and all other visitors. We hope it will be a pleasant occasion for them as well as the physicians. We appreciate the cooperation and the help that the Program Committee receives from the faculties of the University of Louisville and the University of Kentucky. Faculty members give time and effort to the success of the Annual Meeting and we are grateful for it.

The exhibits always add to the meeting and we express our thanks to all of the many different companies active in the health field who are having exhibits this year. There are a number of good scientific exhibits this year and all in all it promises to be a good meeting. A record breaking attendance at the Annual Meeting would be a good statistic to add to a pleasant Kentucky fall.

WALTER S. COE, M.D.

Progress Report

THE members of the class of '23 will find changes in education and in medical care greater, perhaps, than they anticipated when they come to Kentucky for reunion in September. In 1919 when the last victim for the freshman class had been corralled there were 42 nondescript souls recruited from Idaho to West Virginia and from Cleveland to Texas, and no one had been refused admission who presented even a minimum of qualifications. This year there are 100 carefully chosen from more than twice that number who had passable credentials, and 80 in the freshman class at the University of Kentucky College of Medicine in Lexington who have been just as carefully selected. In two more years, with the completion of our new teaching facilities, the class will be increased to 128 and the class at Lexington perhaps to 100. Thus Kentucky now and in the future stands well toward the top among the 50 states in opportunities for medical education in ratio to its population of three million.

There will be opportunity to visit Louisville's rapidly expanding medical center. In the midst, rising well above the ground now, are the $25 million medical and dental instruction units and the library adjacent to the medical-dental research building completed and in operation for the past four years. The eye research building is nearing completion as is also the city health department's

beautiful new facility. The Mental Health, Radiation, and Rehabilitation Centers have been in operation for several years as has an apartment building for medical and dental residents, internes, and students. The relatively new Jewish and Methodist Evangelical Hospitals are now in preparation for extensive enlargements. Norton Memorial Infirmary and Children's Hospital are almost ready to begin construction of their new combined complex. Plans for rebuilding General Hospital are being made and there is prospect of a new teaching hospital. Two professional buildings, now fully occupied, bring together the largest number of physicians and dentists at any one location in the city. Plans are being projected for a variety of other facilities in the Center.

We are glad to report that during your long absence in far-away places, the medical situation at home has not been static. You are welcome home. We hope you will enjoy what you see. Mayhap you will get a ride upstream on the Belle of Louisville. It's a fine ship and may even get back to port without a breakdown.

SAM A. OVERSTREET, M.D.

Challenge

IN a search for values of medicine, an assay of a cross section of the Medical Center today may not be completely meaningful; perspective seems essential. From a review of past performance together with an evaluation of present status may be gleaned true and potential values of medicine to mankind.

Medicine is entering a new phase. One is beginning to see a new challenge in metabolic disease, hereditary and the aging process of which the Heart disease, Cancer, and Stroke program is a part. There is new basic knowledge involved in meeting the challenge; this new knowledge consists of a series of breakthroughs in the last two decades consisting of (1) Avery's establishment, in 1945, of the nucleic acids as the carriers of hereditary material, (2) Watson's and Crick's establishment, in 1953, of the shape, structure and mechanism of transmission of hereditary material of DNA, (3) Nirenberg's breaking the genetic code, in 1962, spelling out how man begets man and mice beget mice—the language of life, and (4) Lederberg's creation, in 1967, of life in the test tube. This new knowledge gives a better understanding of the phenomena of life and of disease.

Medicine today is at about that stage in the development of the new phase that it was at the turn of the century in meeting the challenges of the microbial diseases. At that time there were breakthroughs in basic knowledge; there were specific microbes for a specific disease; there were antitoxin and preventive vaccines; later came understanding of epidemics, mass immunizations, antibiotics, specific drugs and organized effort. Surgery was relieved of the menace of infection. The challenge of microbial disease was met with marked success. In the lifetime of men living today, the life span has lengthened by nearly 30 years; infant mortality has declined from a probable 300 plus in the 1880's; doctors living in Lexington today have seen infant mortality decline since 1923 from 116 to the 20's. Freshmen men students entering the University of Kentucky during a 23 year span, 1930 to 1953, are one-half year younger, 3.9 inches taller, and 23.2 pounds heavier; women are .7 years younger, 2.6 inches taller, and 10.1 pounds heavier. For the same period positive tuberculin tests of all freshmen have declined from 35 percent to 8 percent. These gains in life values have come largely through control of microbial diseases and better nutrition.

The new phase of medicine has potential comparable to the microbial phase at the turn of the century. Then the basic discipline involved was microbiology; now the new phase involves the basic disciplines of biochemistry, biophysics and cell biology; this new phase is more complex; it touches the phenomena of life itself; it has strong public support and organized effort; it has attracted real talent. The results may not be as spectacular; there may not be room this side of the natural limits of life for a gain of another 30 years of longevity predicted by Paul White. But there is potential for a longer life and improvement in the quality of life.

The recent breakthroughs in basic knowledge are sure to have an impact on the medicine of the future; the challenge of the future must be met.

J. S. CHAMBERS, M.D.

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Before prescribing, see complete information, including adverse effects reported with phenothiazines and symptoms and treatment of overdosage, in SK&F literature or *PDR*. The following is a brief precautionary statement.

Contraindications: Comatose states or the presence of large amounts of C.N.S. depressants.

Precautions: Potentiation of C.N.S. depressants may occur (reduce dosage of such agents when used concomitantly). Use with caution in patients with chronic respiratory disorders. Antiemetic effect may mask overdosage of toxic drugs or obscure other conditions. Administer in pregnancy only when necessary. Because of possible drowsiness use cautiously and warn patients who operate vehicles or machinery.

Adverse Reactions: Drowsiness; dry mouth; nasal congestion; constipation; amenorrhea; miosis; mild fever; weight gain; hypotensive effects, sometimes severe with I.M. administration; epinephrine effects may be reversed; dermatological reactions; parkinsonism-like symptoms on high dosages (in rare instances, may persist); lactation and moderate breast engorgement (in females on high dosages); and less frequently, cholestatic jaundice (use cautiously in patients with liver disease). Adverse reactions occurring rarely, include: mydriasis; agranulocytosis; skin pigmentation; epithelial keratopathy; lenticular and corneal deposits (after prolonged substantial doses).

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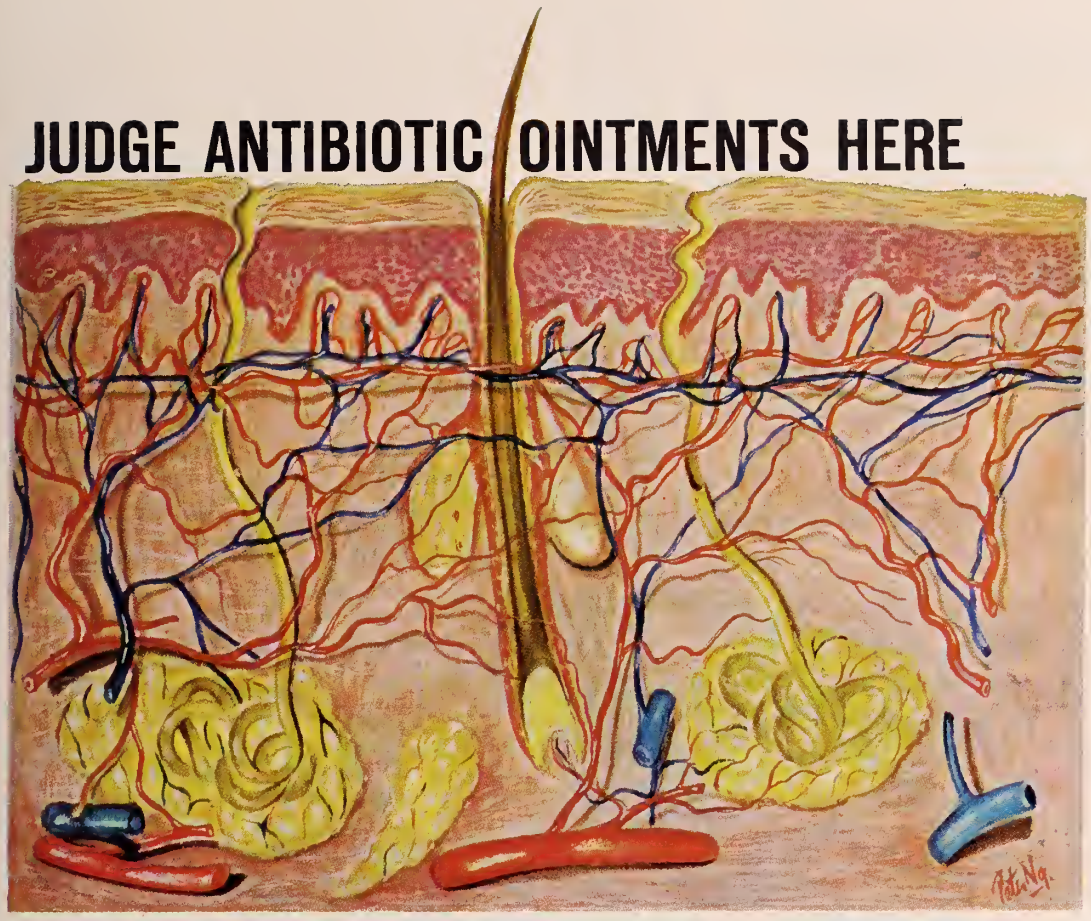
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Caution: As with other antibiotic preparations, prolonged use may result in overgrowth of nonsusceptible organisms and/or fungi. Appropriate measures should be taken if this occurs. Articles in the current medical literature indicate an increase in the prevalence of persons allergic to neomycin. The possibility of such a reaction should be borne in mind.

Contraindications: This product is contraindicated in those individuals who have shown hypersensitivity to any of its components.

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The ability of Valium to help relieve skeletal muscle spasm—as well as psychic tension—demonstrates its clinical value and versatility.

The muscle-relaxant effect obtained with Valium, used adjunctively with other drugs or physiotherapy, favorably affects the entire cluster of spasm-related symptoms . . . helps accelerate return to normal activity.

When skeletal muscle spasm and psychic tension coexist, the calming effect of Valium is an added therapeutic benefit that contributes to the total management of the patient.

Before prescribing, please consult complete product information, a summary of which follows:

Indications: Tension and anxiety states; somatic complaints which are concomitants of emotional factors; psychoneurotic states manifested by tension, anxiety, apprehension, fatigue, depressive symptoms or agitation; acute agitation, tremor, delirium tremens and hallucinosis due to acute alcohol withdrawal; adjunctively in skeletal muscle spasm due to reflex spasm to local pathology, spasticity caused by upper motor neuron disorders, athetosis, stiff-man syndrome, convulsive disorders (not for sole therapy).

Contraindicated: Known hypersensitivity to the drug. Children under 6 months of age. Acute narrow angle glaucoma.

Warnings: Not of value in psychotic patients. Caution against hazardous occupations requiring complete mental alertness. When used adjunctively in convulsive disorders, possibility of increase in frequency and/or severity of grand mal seizures may require increased dosage of standard anticonvulsant medication; abrupt withdrawal may be associated with temporary increase in frequency and/or severity of seizures. Advise against simultaneous ingestion of alcohol and other CNS depressants. Withdrawal symptoms have occurred following abrupt discontinuance. Keep addiction-prone individuals under careful surveillance because of their predisposition to habituation and dependence. In pregnancy, lactation or women of childbearing age, weigh potential benefit against possible hazard.

Precautions: If combined with other psychotropics or anticonvulsants, consider carefully pharmacology of agents employed. Usual precautions indicated in patients severely depressed, or with latent depression, or with suicidal tendencies. Observe usual precautions in impaired renal or hepatic function. Limit dosage to smallest effective amount in elderly and debilitated to preclude ataxia or oversedation.

Side Effects: Drowsiness, confusion, diplopia, hypotension, changes in libido, nausea, fatigue, depression, dysarthria, jaundice, skin rash, ataxia, constipation, headache, incontinence, changes in salivation, slurred speech, tremor, vertigo, urinary retention, blurred vision. Paradoxical reactions such as acute hyperexcited states, anxiety, hallucinations, increased muscle spasticity, insomnia, rage, sleep disturbances, stimulation, have been reported; should these occur, discontinue drug. Isolated reports of neutropenia, jaundice; periodic blood counts and liver function tests advisable during long-term therapy.

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If it doesn't work in a week, forg

t please don't forget this:

ntraindications: Edema; danger of cardiac compensation; history or symptoms of peptic er; renal, hepatic or cardiac damage; tory of drug allergy; history of blood dys- asia. The drug should not be given when the tient is senile or when other potent drugs are en concurrently. Large doses of the alka mulation are contraindicated in glaucoma.

rning: If coumarin-type anticoagulants are en simultaneously, watch for excessive rease in prothrombin time. Instances of ere bleeding have occurred. Persistent or ere dyspepsia may indicate peptic ulcer; form upper gastrointestinal x-ray diagnostic ts if drug is continued. Pyrazole compounds y potentiate the pharmacologic action of fonylurea, sulfonamide-type agents and ulin. Carefully observe patients receiving h therapy. Use with caution in the first tri- ster of pregnancy and in patients with roid disease.

cautions: Before prescribing, carefully ect patients, avoiding those responsive to tine measures as well as contraindicated ients. Obtain a detailed history and a com- te physical and laboratory examination, luding a blood count. The patient should not eed recommended dosage, should be sely supervised and should be warned to continue the drug and report immediately ver, sore throat, or mouth lesions (symp- s of blood dyscrasia); sudden weight gain ter retention); skin reactions; black or tarry ols or other evidence of intestinal hemor- ge occur. Make complete blood counts at kly intervals during early therapy and at eek intervals thereafter. Discontinue the g immediately and institute counter- asures if the white count changes signifi- tly, granulocytes decrease, or immature ns appear. Use greater care in the elderly in hypertensives.

erse Reactions: The more common are sea and edema. Swelling of the ankles or may be minimized by withholding dietary reduction in dosage or use of diuretics. In rly patients and in those with hypertension drug should be discontinued with the earance of edema. The drug has been ciated with peptic ulcer and may reac- e a latent peptic ulcer. The patient should be instructed to take doses immediately before or after meals or with milk to minimize gastric upset. Drug rash occasionally occurs. If it does, promptly discontinue the drug. Agranulocytosis, exfoliative dermatitis, Stevens-Johnson syndrome, Lyell's syndrome (toxic necrotizing epidermolysis), or a generalized allergic reaction similar to serum sickness may occur and require permanent withdrawal of medication. Agranulocytosis can occur suddenly in spite of regular, repeated normal white counts. Stomatitis, salivary gland enlargement, vomiting, vertigo and languor may occur. Leukemia and leukemoid reactions have been reported. While not definitely attributable to the drug, a causal relationship cannot be excluded. Thrombocytopenic purpura and aplastic anemia may occur. Confusional states, agitation, headache, blurred vision, optic neuritis and transient hearing loss have been reported, as have hyperglycemia, hepatitis, jaundice, hypersensitivity angiitis, pericarditis and several cases of anuria and hematuria. With long-term use, reversible thyroid hyperplasia may occur infrequently. Moderate lowering of the red cell count due to hemodilution may occur.



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In selecting the appropriate dosage in any specific case, consideration should be given to the patient's weight, general health, age and any other factors influencing drug response. (B)R 65-070-A

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ORGANIZATION SECTION

Color TV, President's Luncheon To Highlight Annual Meeting

Four color TV panel discussions and an address by the lieutenant governor of Oklahoma at the President's Luncheon will highlight the program planned for the KMA Annual Meeting September 24-26 in Louisville.

Each of the four sessions of the scientific program at Convention Center will feature a color TV presentation followed by a panel discussion in which guest speakers and KMA members will participate. The themes for these sessions will be "Respiratory Diseases," "Emergency Medical Care," "Office Examinations" and "Human Sexuality."

Oklahoma's Lt. Governor George Nigh will entertain physicians and their wives with a talk entitled "It's a Fast, Fast World" at the President's Luncheon September 25 in the Flag Room of the Kentucky Hotel. KMA's three top awards will also be presented at that time.

During the three-day session at Convention Center, a number of guest speakers and KMA members will participate in the scientific program to discuss a variety of medical topics. Seventy-six technical exhibits and 21 scientific exhibits will be on display in the Technical Exhibit Hall for the benefit of members and guests.

Other special features will include meetings of 16 specialty groups, two sessions of the KMA House of Delegates, an Orientation Program for new KMA members, the annual convention of the Woman's Auxiliary, the KEMPAC Seminar and University of Louisville Alumni Reunions.

All Kentucky physicians are urged by KMA President George F. Brockman, M.D. to take advantage of this outstanding opportunity to acquire the most up-to-date information on medical progress by participating in the 1968 Annual Meeting.

AMPAC Board Member To Appear On KEMPAC Seminar Program

A feature of the annual KEMPAC Seminar September 23 will be a talk by Mrs. Frank Gastineau, Indianapolis, Ind., a member of the AMPAC Board. Beginning at 6 p.m. in the Flag Room of the Kentucky Hotel, the evening's program will include a reception and banquet followed by the seminar, according to John C. Quertermous, M.D., Murray, KEMPAC Board chairman.

Mrs. Gastineau, who served as president of the Woman's Auxiliary to the American Medical Association in 1959-60, will discuss some of the ways in which members of KEMPAC may support their candidates in the coming election. She will place special emphasis on the woman's role in these activities.

Sharing the program with Mrs. Gastineau will be Kentucky's U.S. senatorial candidates, Miss Katherine Peden (D), Hopkinsville, and Judge Marlow Cook (R), Louisville. The two candidates have been asked to discuss the means through which members of the medical profession can most effectively participate in political action.

KMA, Auxiliary Plan Reception During Annual Meeting

The Kentucky Medical Association and the Woman's Auxiliary to KMA extend a most cordial invitation to you to attend a reception from 5:30 to 7:15 p.m., Tuesday, September 24, in the Mirror Room (just off the lobby) of the Kentucky Hotel.

While other meetings are scheduled later during the evening, the Auxiliary and KMA hope you will find this an opportune time, as your first function of the evening, to be present.

You will have an opportunity at the reception to greet the president-elect of KMA, Henry B. Asman, M.D., Louisville, and the president-elect of the Auxiliary, Mrs. William H. McBeath, Lexington, and to meet some of our distinguished guests and your friends from throughout the state.

Annual AMA Clinical Convention To Be Dec. 1-4 in Miami Beach

The 22nd Annual Clinical Convention of the American Medical Association, featuring medical motion pictures, color telecasts, postgraduate courses, breakfast roundtables and clinical workshops, will be in Miami Beach, Fla., December 1-4, according to a recent release from the AMA Headquarters Office.

Among the motion pictures scheduled to be shown at the convention, two of the five premiere films will be "Shock and Recognition and Management" and "Granulomatous and Ulcerative Colitis." A film symposium is planned on "Problems of Chest Pain."

Two one-hour sessions of postgraduate courses daily will concern diabetes, fluid and electrolyte balance and thyroid disease. Clinical workshops will

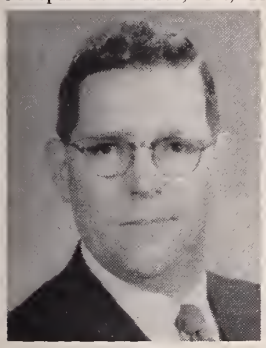
include the topics of eye problems, cardiovascular disease, diabetes and office urology.

The color television programs will cover obstetrics-gynecology, cerebral vascular disease and amputee and stroke rehabilitation. Four breakfast round-tables will include discussions of many facets of medicine.

All physicians are invited by Dwight L. Wilbur, M.D., AMA president, to attend any of the sessions of the Clinical Convention and to view the 125 scientific exhibits on display during the meeting.

KPA Names Louisville Pharmacist President-Elect at July Mtg.

The Kentucky Pharmaceutical Association chose Joseph T. Elmes, Sr., R.Ph., Louisville, as its new president-elect and installed Vernon B. Hager, R. Ph., Nicholasville, president at its 91st Annual Convention July 21-25 in Lexington.



Mr. Elmes

Other KPA officers for 1968-69 include J. B. Hitt II, R. Ph., Lexington, second vice-president; David D. Dubrock, R. Ph., Arlington, third vice-president; Leo J. Wagner, R. Ph., secretary; and Maxwell H. Schulten, R. Ph., treasurer. Wagner and Schulten are also from Louisville.

Elmes graduated from the University of Kentucky College of Pharmacy in 1950. He is a past president and chairman of the board of directors of the Jefferson County Academy of Pharmacy, a former member of the board of the Jefferson County Academy of Pharmacy, a former member of the board of the Jefferson County Pharmaceutical Society, a member of the American Pharmaceutical Association and was a member of the KPA board from 1966-68.

Home Care Conference Scheduled October 16-17 in Louisville

A two-day Home Care Conference, featuring a keynote address by Sidney Chapin, M.D., Home Care Medical Director of the Detroit Visiting Nurse Association has been planned for October 16 and 17 in Louisville.

Jointly sponsored by the Health Facilities Council, Inc., the Kentucky Department of Health and the Visiting Nurse Association, the program will also include panel discussions and group workshops in which physicians and members of allied medical groups will participate.

All Kentucky physicians are invited to attend the Conference and will receive a brochure of program details, including the location of the meeting, in September.

Twenty-One Scientific Exhibits Set For Display at Annual Meeting

Twenty-one scientific exhibits depicting the latest advances in medical progress and research have been selected for display at Convention Center during the KMA Annual Meeting, September 24-26 in Louisville. The exhibits will be located between the Technical Exhibit Hall and the Scientific Assembly Hall during the three-day session.

The prize-winning exhibitor will receive a plaque from KMA and the Aesculapius Award and a $200 check from Mead Johnson Laboratories. Each participating exhibitor will be awarded a certificate by KMA.

A complete list of the exhibits, supplied by Scientific Exhibits Committee Chairman Thomas R. Marshall, M.D., Louisville, follows.

"Pacemakers"
W. Porter Mayo, Jr., M.D.
Richard B. McElvein, M.D.
Graydon A. Long, M.D.

"I.U.D. for Fertility Control"
Ralph R. Robinson, M.D.

"Use of the Pectoralis Minor Muscle in Augmentation Mammoplasty"
George B. Sanders, M.D.

"Food and Gastrointestinal Disorders"
Mary Jane Kibler

"Fracture of the Face and Mandibles"
Robert C. Kratz, M.D.
Alvin C. Poweleit, M.D.
William Townsend, D.M.D.

"Modern Examination of the Gastrointestinal Tract by Television Fluoroscopy and Magnetic Tape Recording"
T. R. Marshall, M.D.

"The Management of Ocular Emergencies"
Dan M. Gordon, M.D.

"Surgical Correction of Cicatrical Alopecias"
D. B. Stough, M.D.

"The Value of Gastrocamera Endorcopy"
David H. Johnston, M.D.
Ben Watson, M.D.

"Familial Multiple Polyposis"
Henry B. Asman, M.D.

"Oral Cancer Diagnosis"
Condict Moore, M.D.

"Eye Findings in Developmental Disorders"
William C. Edwards, M.D.

"Multiple Monitored Exectroconvulsive Therapy"
Roger K. White, M.D.

"Patient's Progress as Reflected in Art"
Roger K. White, M.D.

"Renal Homotransplantation"
Donald G. Vidt, M.D.
Bruce H. Steward, M.D.
Satoru Nakamoto, M.D.

"Recognition and Treatment of Ocular Trauma"
Jonathan D. Wirtschafter, M.D.

"Evaluation of the Multihandicapped Child"
Bernard Weisskopf, M.D.

"Thrombelastography"
Giovanni Raccuglia, M.D.

"Asymptomatic Recto-Sigmoidal Polyps"
William T. Rumage, Jr., M.D.
John Eckerle, M.D.
Herman D. Pocock, M.D.
Mr. Robert Merrill

"School of Allied Health Professions"
Joseph Hamburg, M.D.

"Current Management of the RH Negative Gravida"
Joseph M. Mahan, M.D.
Walter Wolfe, M.D.

To fight TB- find it first!

Make tuberculin testing routine with every physical examination.



TUBERCULIN, TINE TEST (Rosenthal)

Side effects are possible but rare: vesiculation, ulceration, or necrosis at test site. Contraindications: none, but use with caution in active tuberculosis. Available in 5's and 25's.

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Medical Groups Plan Meetings To Complement KMA Session

A variety of miscellaneous meetings of medical groups have been planned in conjunction with the KMA Annual Meeting in September. The time, date and place of all meetings scheduled at press time are listed below.

Saturday, September 21

6:30 p.m. Board of Directors, Kentucky Physicians Mutual, Dinner, Pendennis Club

Sunday, September 22

12:30 p.m. KMA Board of Trustees, Luncheon meeting, Parlor A, Kentucky Hotel

5:00 p.m. Social Hour, University of Kentucky College of Medicine, Parlors B and C, Kentucky Hotel

Monday, September 23

8:00 a.m. KMA Awards Committee, Breakfast, Room 201, Kentucky Hotel

8:30 a.m. Orientation Program, New KMA Members, Mirror Room, Kentucky Hotel

9:00 a.m. KMA House of Delegates Meeting, Terrace Room, Kentucky Hotel

12:00 Noon KMA Maternal Mortality Study Committee, Luncheon meeting, Room 205, Kentucky Hotel

12:30 p.m. Reference Committee Chairmen, Luncheon, Room 317, Kentucky Hotel

2:00 p.m. Six Reference Committee meetings, Parlors A, B, C, and D and Rooms 203, 204, Kentucky Hotel

6:00 p.m. KEMPAC Reception, Banquet and Seminar, Flag Room, Kentucky Hotel

Tuesday, September 24

7:30 a.m. Panel on Respiratory Diseases, Breakfast meeting, Room 201, Kentucky Hotel

8:00 a.m. Cancer Clinic Directors, Breakfast Meeting, Room 203, Kentucky Hotel

12:00 Noon Kentucky Obstetrical and Gynecological Society, Luncheon, Howard Johnson's

12:00 Noon Kentucky Society of Pathologists, Luncheon, Parlor C, Kentucky Hotel

12:00 Noon Board of Directors, University of Louisville Medical Alumni Association, Luncheon meeting, The Old House

12:30 p.m. Kentucky Flying Physicians, Luncheon Meeting, Kentucky Hotel

5:30-7:15 p.m. KMA- Woman's Auxiliary Reception, Mirror Room, Kentucky Hotel

(Continued on Page 838)

Abbott Antihypertensive Building Blocks

A simplified approach to the practical management of hypertension



Enduron: (methyclothiazide) A basic building block for mild hypertensives



Excellent day-long Na^+ output, yet easy on the K^+

Enduron provides an excellent starting therapy. Your patie' sodium excretion is greatly enhanced. Yet potassium loss is l

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Of course, as with all thiazides, supplemental dietary potass n should also be considered.

Use Enduron as a basic therapy in patients with mild to n erate hypertension. A single 5-mg. tablet each day is ampl most cases.

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METHYCLOTHIAZIDE



See Brief Summary on final page of advertisement

Enduronyl: Its deserpidine component adds response in moderate hypertension



Less frequent rauwolfia side effects than with reserpine

When you wish to build further response, consider shifting to Enduronyl.

Enduronyl adds a building block of *deserpidine*. This is a purified rauwolfia alkaloid available only from Abbott. It adds good antihypertensive and tranquilizing activity. Yet its incidence of untoward effects, particularly lethargy and depression, is lower than with reserpine.

Enduronyl is available plain or Forte. The latter provides its variation where most helpful, by doubling the deserpidine.

Use Enduronyl for patients throughout the broad range of mild to moderately severe hypertension.

Once a day, every day

ENDURONYL®

METHYCLOTHIAZIDE 5 mg. with DESERPIDINE 0.25 mg. or (FORTE) 0.5 mg.

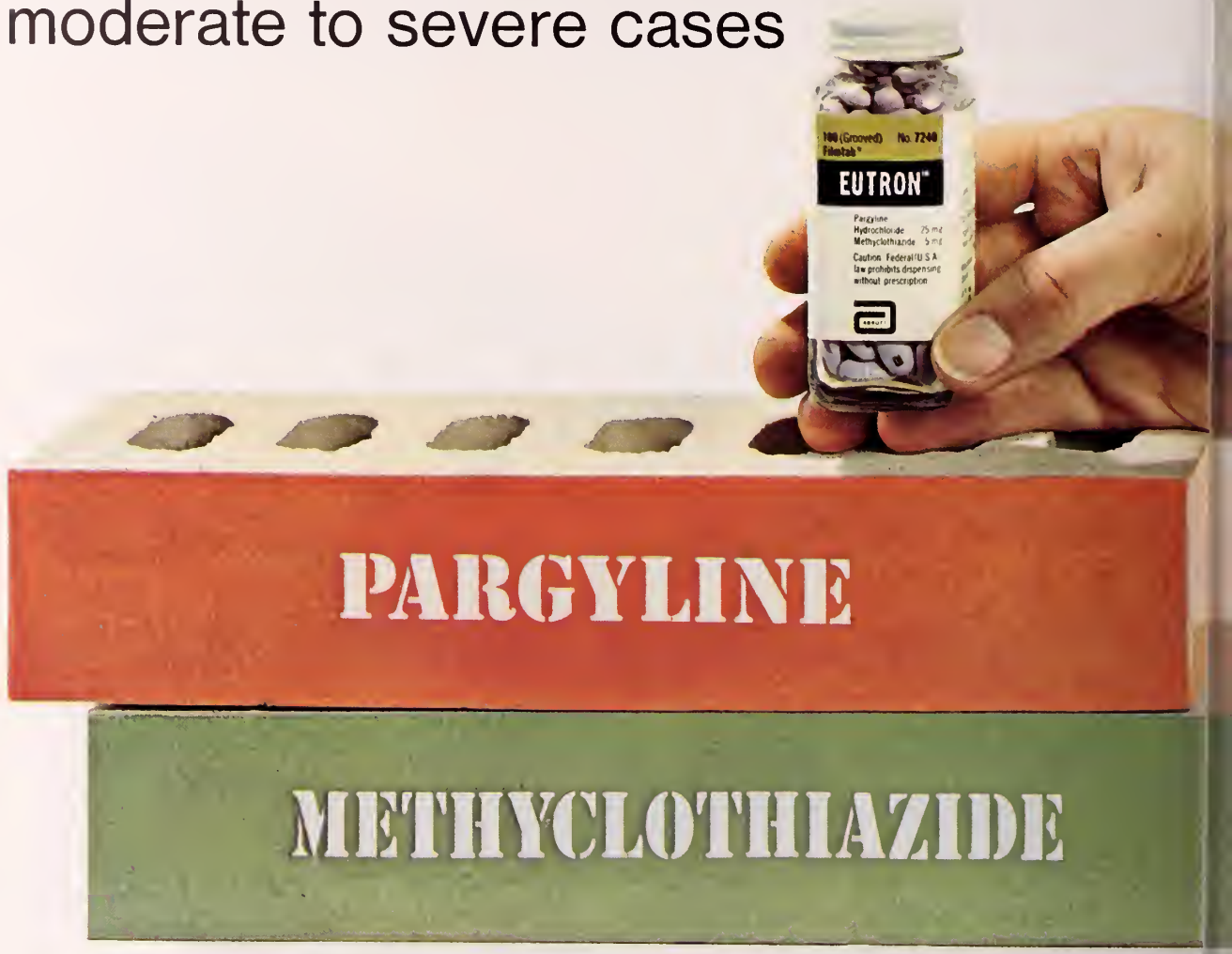
MILD TO MODERATE TO SEVERE



See Brief Summary on final page of advertisement

801094

Eutron: A unique combination for handling moderate to severe cases



Affords almost uniform diastolic reduction in all body positions

Eutron lowers diastolic pressures nearly equally, whether your patient is standing up or lying down.

Thus, in clinical trials, average *standing* diastolic readings were reduced from 112 pre-treatment to 90 post-treatment; *sitting* from 115 to 95; and *recumbent* from 112 to 94.

Note that following Eutron, the diastolic reductions were nearly alike in all three body positions.

Use Eutron for managing your moderate to severe cases. Its building blocks enhance each other; hence lesser doses often suffice.

Once a day, every day

EUTRON™

PARGYLINE HYDROCHLORIDE 25 mg.
with METHYCLOTHIAZIDE 5 mg.

MILD TO MODERATE TO SEVERE



See Brief Summary on final page of advertisement

ENDURON® | ENDURONYL®

METHYCLOTHIAZIDE

Each tablet contains Methyclothiazide 5 mg. with Deserpidine 0.25 mg. or 0.5 mg.

Indications: Edema and mild to moderate hypertension (Enduron), and mild to moderately severe hypertension (Enduronyl). More potent agents, if added, can be given at reduced dosage.

Contraindications: Sensitivity to thiazides; severe renal disease (except nephrosis) or shutdown; severe hepatic disease or impending hepatic coma (hepatic coma due to hypokalemia has been reported in patients on thiazides). Do not use Enduronyl in severe mental depression, suicidal tendencies, active peptic ulcer, or ulcerative colitis.

Warnings: Consider possible sensitivity where there is history of allergy or asthma. If added potassium is indicated, dietary supplementation is recommended. Reserve enteric-coated potassium tablets for cautious use only when necessary, as they may induce serious or fatal small bowel lesions (stenosis with or without ulceration), cause obstruction, hemorrhage, and perforation often requiring surgery; discontinue them immediately if abdominal pain, distention, nausea, vomiting, or g.i. bleeding occurs. Neither Enduron nor Enduronyl contains added potassium.

Precautions: Use thiazides cautiously in severe renal dysfunction, impaired hepatic function or progressive liver disease; also in pregnancy (bone marrow depression, thrombocytopenia, and altered carbohydrate metabolism have been reported in certain newborn). In surgery, thiazides may reduce response to vasopressors, and increase response to tubocurarine. Antihypertensive response may be enhanced following sympathectomy. Watch for electrolyte imbalance (e.g., hyponatremia) in all patients. In hypokalemia (especially in digitalized patients) give supplemental potassium. In hypochloremic alkalosis, give supplemental chloride.

Use rauwolfias with caution in patients with history of peptic ulcer. Rauwolfias with anesthetics may produce hypotension and bradycardia. Discontinue Enduronyl two weeks before elective surgery. Consider vagal blocking agents during emergency surgery. In epilepsy, adjust anticonvulsant dosage. In electroshock, shorten stimulus strength and duration. In occasional patients with depressive tendencies, rauwolfias may precipitate severe mental depression that usually disappears when drug is stopped.

Adverse Reactions: Thiazide reaction include blood dyscrasias (thrombocytopenia with purpura, agranulocytosis, aplastic anemia); elevation of BUN, serum uric acid or blood sugar; anorexia, nausea, vomiting, diarrhea, headache, dizziness, paresthesia, weakness, skin rash, photosensitivity, jaundice, symtomatic gout, and pancreatitis. Cutaneous vasculitis in the elderly has been reported with other thiazides. Adverse effects with deserpidine are qualitatively similar to those with reserpine, but their incidence is lower. These include nasal stuffiness, abdominal cramps or diarrhea, nausea, headache, weight gain, reduced libido and potency, peptic ulcer aggravation, epistaxis, skin eruption, asthma in susceptible patients, electrolyte imbalance, excessive salivation, and a reversible Parkinson's syndrome. Excessive drowsiness, fatigue, weakness, and nightmares may signal mental depression. Thrombocytopenia, purpura, and a symptom manifested by dull sensorium, deafness, uveitis, glaucoma, and optic atrophy are rare allergic reactions to other rauwolfias. Hypotension from antihypertensive agents may precipitate angina attacks in susceptible individuals. Usually adverse reactions disappear when drug is withdrawn.

EUTRON™

Each tablet contains Pargyline Hydrochloride 25 mg. with Methyclothiazide 5 mg.

Indications—Moderate to severe hypertension.

Contraindications—Pheochromocytoma, paranoid schizophrenia, hyperthyroidism and advanced renal failure. Not recommended in malignant hypertension, children under 12, pregnant patients.

Do not use with: centrally or peripherally acting sympathomimetic drugs; foods high in tyramine (e.g., aged and natural cheeses); parenteral reserpine or guanethidine; imipramine, amitriptyline, desipramine, nortriptyline or their analogues; other monoamine oxidase inhibitors; methyldopa or dopamine; separate Eutron and these agents by two weeks.

Sensitivity to thiazides; severe renal disease (except nephrosis) or shutdown; severe hepatic disease; impending hepatic coma from thiazide-induced hypokalemia.

Warnings—Patients: 1. No other drugs (particularly "cold preparations" and antihistamines), cheese or alcohol without physician's consent. 2. Promptly report orthostatic symptoms, severe headache, other unusual symptoms. 3. Angina pectoris or coronary artery disease patients must not increase physical activity with improved anginal symptoms or well-being.

Physicians: 1. Use antihistamines, hypnotics, sedatives, tranquilizers and narcotics (meperidine contraindicated) cautiously in reduced doses. 2. Stop Eutron two or more weeks before elective surgery; in emergency surgery reduce premedication (narcotics, sedatives, analgesics, etc.) to 1/4 to 1/5; carefully adjust anesthetic dosage to patient response. 3. Use cautiously in advanced renal failure. 4. Pargyline may induce hypoglycemia. 5. Consider possible sensitivity reactions when a history of allergy or asthma is present. 6. If potassium is indicated, dietary supplement is recommended; enteric-coated potassium tablets may induce serious or fatal small bowel lesions (stenosis with or without ulceration), cause obstruction, hemorrhage, and perforation frequently requiring surgery; discontinue medication immediately if abdominal pain, distention, nausea, vomiting or gastrointestinal bleeding occurs; Eutron does not contain added potassium. 7. Possible systemic lupus erythematosus has been reported for thiazides.

Precautions—Pargyline: Use cautiously at reduced dosage: caffeine, alcohol, antihistamines, barbiturates, chloral hydrate, other hypnotics, sedatives, tranquilizers, narcotics. Periodically do urinalyses, blood counts, liver function tests, etc. Use with caution in liver disease. Watch for orthostatic hypotension, especially in impaired circulation (e.g., angina pectoris, coronary artery disease, cerebral arteriosclerosis); also, augmented hypotension in concomitant febrile illnesses. Reduce or discontinue if hypotension is severe. In impaired renal function watch for cumulative drug effects, elevated BUN and other evidence of progressive renal failure; withdraw drug if these persist. In surgery increased central depressant response (hypotension and increased sedative effect) can be controlled by (1) discontinuing at least two weeks prior; (2) in emergency surgery lowering dose of premedication; (3) when necessary, administering a vasopressor. Do not use in hyperactive and hyperexcitable patients. Pargyline may unmask severe psychotic symptoms where emotional problems pre-exist. Use cautiously in Parkinsonism, especially with antiparkinsonian agents. In prolonged therapy, examine for change in color perception, visual fields, fundi and visual acuity. Also, prolonged therapy has made certain patients refractory to nerve blocking effects of local anesthetics.

Methyclothiazide: Use cautiously in severe renal dysfunction, impaired hepatic function or progressive liver disease; also in pregnancy (bone marrow depression, thrombocytopenia, and altered carbohydrate metabolism have been reported in certain newborn). In surgery thiazide may reduce vasopressor response and increase tubocurarine response. Antihypertensive response may be enhanced following sympathectomy. Watch for electrolyte imbalance (e.g., hyponatremia). Give supplemental chloride if hypochloremic alkalosis occurs and supplemental potassium if hypokalemia occurs (especially in digitalized patients). Thiazides may decrease serum P.B.I. without signs of thyroid disturbance.

Adverse Reactions — Pargyline: Orthostatic hypotension and associated symptoms, mild constipation, fluid retention, edema, dry mouth, sweating, increased appetite, arthralgia, nausea, vomiting, headache, insomnia, difficult in micturition, nightmares, impotence, delayed ejaculation, rash, purpura, weight gain, hyperexcitability, increased neuromuscular activity and other extrapyramidal symptoms. Drug fever is extremely rare. Reduction in blood sugar and hypoglycemic effects are possible. Congestive heart failure has been reported in a few patients with reduced cardiac reserve.

Methyclothiazide: Blood dyscrasias (thrombocytopenia with purpura, agranulocytosis, aplastic anemia); elevation of BUN, blood sugar or serum uric acid (gout may be induced); anorexia, nausea, vomiting, diarrhea, headache, dizziness, paresthesia, weakness, skin rash, photosensitivity, jaundice and pancreatitis. Cutaneous vasculitis in elderly patients has been reported with other thiazides.

If side effects are severe or persist, reduce dosage or withdraw drug. 804438R

ABBOTT

TM-TRADEMARK



(Continued from Page 832)

5:30 p.m. Kentucky Society of Anesthesiologists, Social Hour and Dinner, The Old House

6:00 p.m. Kentucky Orthopaedic Society, Social Hour, Pendennis Club

6:00 p.m. Kentucky Urological Society, Social Hour and Dinner, Oak Room, Sheraton Hotel

6:30 p.m. Kentucky Chapter, American College of Chest Physicians, Social Hour and Dinner, Ship Room, Kentucky Hotel

6:30 p.m. Kentucky Dermatological Society, Social Hour and Dinner, Pendennis Club

6:30 p.m. Kentucky Chapter, American Academy of Pediatrics, Social Hour and Dinner, Executive Inn

Wednesday, September 25

9:00 a.m. State Board of Health Meeting, Room 317, Kentucky Hotel

11:50 a.m. President's Luncheon, Flag Room, Kentucky Hotel

5:00 p.m. Board of Trustees Meeting, Parlor B, Kentucky Hotel

6:00 p.m. Board of Trustees, Dinner, Parlor A, Kentucky Hotel

6:00 p.m. House of Delegates Subscription Dinner, Terrace Room, Kentucky Hotel

7:00 p.m. House of Delegates, Terrace Room, Kentucky Hotel

Thursday, September 26

7:00 a.m. MEA Liaison Committee, Breakfast, Room 203, Kentucky Hotel

10:00 a.m. Kentucky Diabetes Association, Meeting, Mirror Room, Kentucky Hotel

11:00 a.m. Kentucky Chapter, American College of Surgeons, Council Meeting, Room 317, Kentucky Hotel

12:00 Noon KMA Board of Trustees, Lnucheon, Parlor A, Kentucky Hotel

12:00 Noon Kentucky EEN&T Society, Luncheon, The Old House

12:00 Noon Kentucky Chapter, American College of Surgeons, Subscription Luncheon, Room 317, Kentucky Hotel. Remarks by the President.

12:30 p.m. Kentucky Diabetes Association, Luncheon, Mirror Room, Kentucky Hotel

5:00 p.m. Kentucky Psychiatric Association, Social Hour and Dinner, Mirror Room, Kentucky Hotel

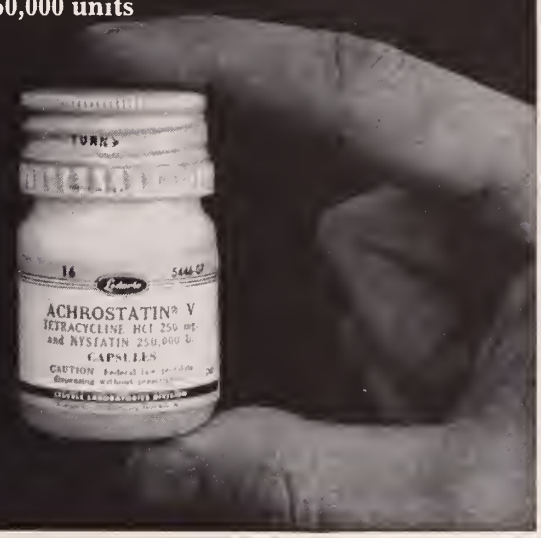
6:30 p.m. Kentucky EEN&T Society, Dinner, Executive Inn

Riot Problems Topic of KHA Mtg.

Problems hospitals encounter during civil disorders was the topic of a session of the Kentucky Hospital Association's summer quarterly meeting July 31 at the Kentucky Hotel, Louisville. The session was jointly sponsored by the KHA and the Kentucky Medical Association.

Participants in the discussion, which outlined suggestions for hospital emergency planning in preparation for riot problems, included William A. Rumage M.D., Louisville, chairman of the KMA and AMA Disaster Medical Care Committees, and Wendell A. Butcher, M.D,. Columbus, Ohio, a member of the AMA committee.

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One of the 31 useful dosage forms in the ACHRO Family
ACHROSTATIN® V Capsules
Tetracycline HCl 250 mg /Nystatin 250,000 units



The lowest priced tetracycline-nystatin combination

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Tuberculosis? Influenza?
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Chronic Chest Diseases?
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(Histoplasmosis—"The Masquerader")



A new aid in differential diagnosis
HISTOPLASMIN, TINE TEST
(Rosenthal)
The LEDERTINE™ Applicator with the Blue Handle

Precautions—Nonspecific reactions are rare, but may occur. Vesiculation, ulceration or necrosis may occur at test site in highly sensitive persons. The test should be used with caution in patients known to be allergic to acacia, or to thimerosal (or other mercurial compounds).

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Ask your representative for details or write Medical Advisory Dept., Lederle Laboratories, Pearl River, New York 10965. 406-8





Each Cough Calmer™ contains the same active ingredients as a half-teaspoonful of Robitussin-DM®: Glyceryl guaiacolate, 50 mg.; Dextromethorphan hydrobromide, 7.5 mg. A. H. Robins Company, Richmond, Virginia 23220

A·H·ROBINS

In Memoriam

JULIAN B. ADAMS, M.D.
Formerly of Louisville
1916-1968

Julian B. Adams, M.D., 52, a Chattanooga, Tenn. general practitioner, died July 7 at a Lookout Mountain hospital. Doctor Adams attended the University of Kentucky and graduated from the University of Louisville School of Medicine in 1954. He had practiced in Chattanooga since 1955.

RALPH E. CARDWELL, M.D.
Providence
1891-1968

Ralph E. Cardwell, M.D., 77, a retired Providence physician, died July 16 at his home. A 1932 graduate of Creighton University School of Medicine, Omaha, Neb., Doctor Cardwell practiced in Providence from 1932 until his retirement in 1963. He founded and operated the Cardwell Clinic and he served three terms as mayor of Providence.

JOSEPH D. HEITGER, M.D.
Louisville
1882-1968

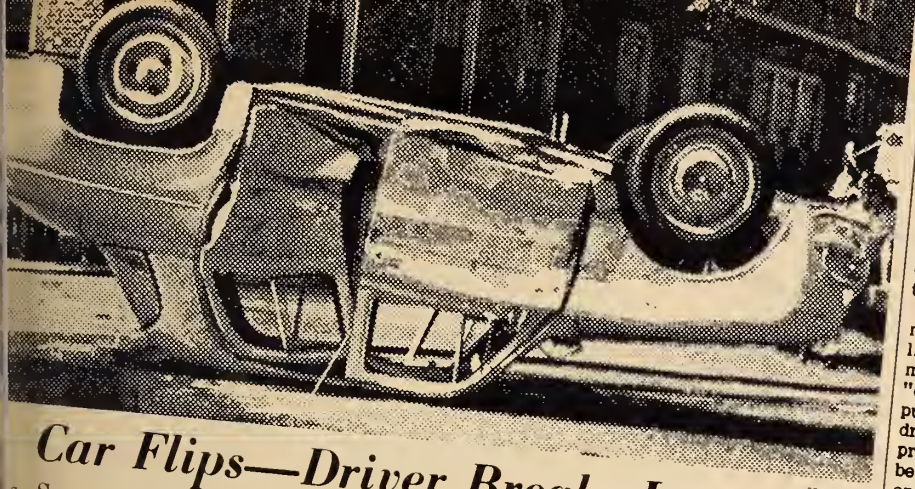
Joseph D. Heitger, M.D., 86, a retired eye, ear, nose and throat specialist who practiced 40 years in Louisville, died August 5 at a Louisville nursing home. Doctor Heitger graduated from the University of Michigan Medical School in 1908 and for 53 years studied at the Mayo Clinic during his vacations. He was the author of numerous scientific publications.

J. ALLEN KIRK, M.D.
Louisville
1887-1968

J. Allen Kirk, M.D., 81, a Louisville surgeon for 58 years, died August 12 at St. Anthony Hospital. Doctor Kirk graduated from the University of Louisville School of Medicine in 1910 and taught there between 1913 and 1920. He was a member of the International College of Surgeons.

HARRY N. RITTER, M.D.
Louisville
1885-1968

Harry N. Ritter, M.D., 83, an eye, ear, nose and throat specialist, died August 11 at a Louisville Nursing Home. A 1910 graduate of the University of Louisville School of Medicine, Doctor Ritter practiced in Louisville from 1913 until his retirement. He served with the Public Health Service during World War I and was a member of the Louisville Eye and Ear Society and the American College of Surgeons.



STAFF PHOTO

Car Flips—Driver Breaks Leg

s, Sept. 7. John P. Jones of
incurred a broken leg today
driving

Patrolman B. R. Brown, the car hit a fire hydrant and flipped over on its top
Hasn't he

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He's had enough excitement for one day.

For the patient who has been through an accident, the worry and anxiety following the experience may actually heighten the perception of pain. This is why there's a classic ¼ grain *sedative* dose of phenobarbital in Phenaphen with Codeine—*to take the nervous "edge" off,* so the rest of the formula can control the pain more effectively.

Phenaphen® with Codeine

Phenaphen® with Codeine No. 2, No. 3, or No. 4 contains: *Phenobarbital* (¼ gr.), 16.2 mg. (Warning: may be habit forming); Aspirin (2½ gr.), 162.0 mg.; Phenacetin (3 gr.), 194.0 mg.; Hyoscyamine sulfate, 0.031 mg.; Codeine Phosphate, ¼ gr. (No. 2), ½ gr. (No. 3), or 1 gr. (No. 4). (Warning: may be habit forming).

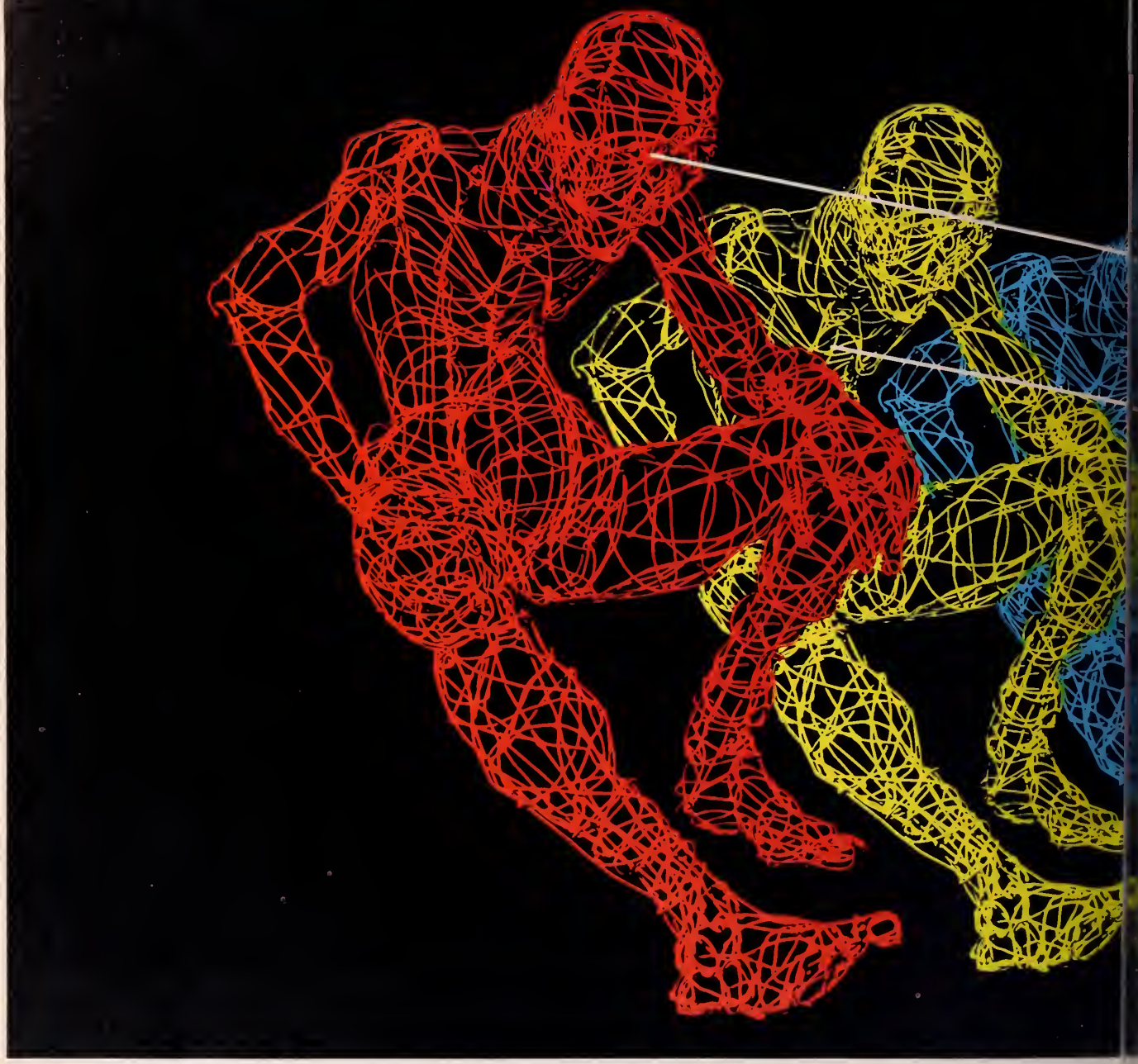
THE COMPOUND ANALGESIC THAT CALMS INSTEAD OF CAFFEINATES

Indications: Phenaphen with Codeine provides relief in severer grades of pain, on low codeine dosage, with minimal possibility of side effects. Its use frequently makes unnecessary the use of addicting narcotics. **Contraindications:** Hypersensitivity to any of the components. **Precautions:** As with all phenacetin-containing products excessive or prolonged use should be avoided. **Side effects:** Side effects are uncommon, although nausea, constipation and drowsiness may occur. **Dosage:** 1 or 2 capsules at 2 to 4 hour intervals, or as directed by physician. For further details see product literature.

A.H. ROBINS COMPANY
RICHMOND, VA. 23220 A·H·ROBINS



a comprehensive hematinic



Description: Each Pulvule® contains—

Special Liver-Stomach Concentrate, Lilly (containing Intrinsic Factor)	150	mg.
Cobalamin Concentrate, N.F., equivalent to Cobalamin (The total vitamin B_{12} activity in the Special Liver-Stomach Concentrate, Lilly, and the Cobalamin Concentrate, N.F., is 15 micrograms.)	7.5	mcg.
Iron, Elemental (as Ferrous Fumarate)	110	mg.
Ascorbic Acid (Vitamin C)	75	mg.
Folic Acid	1	mg.

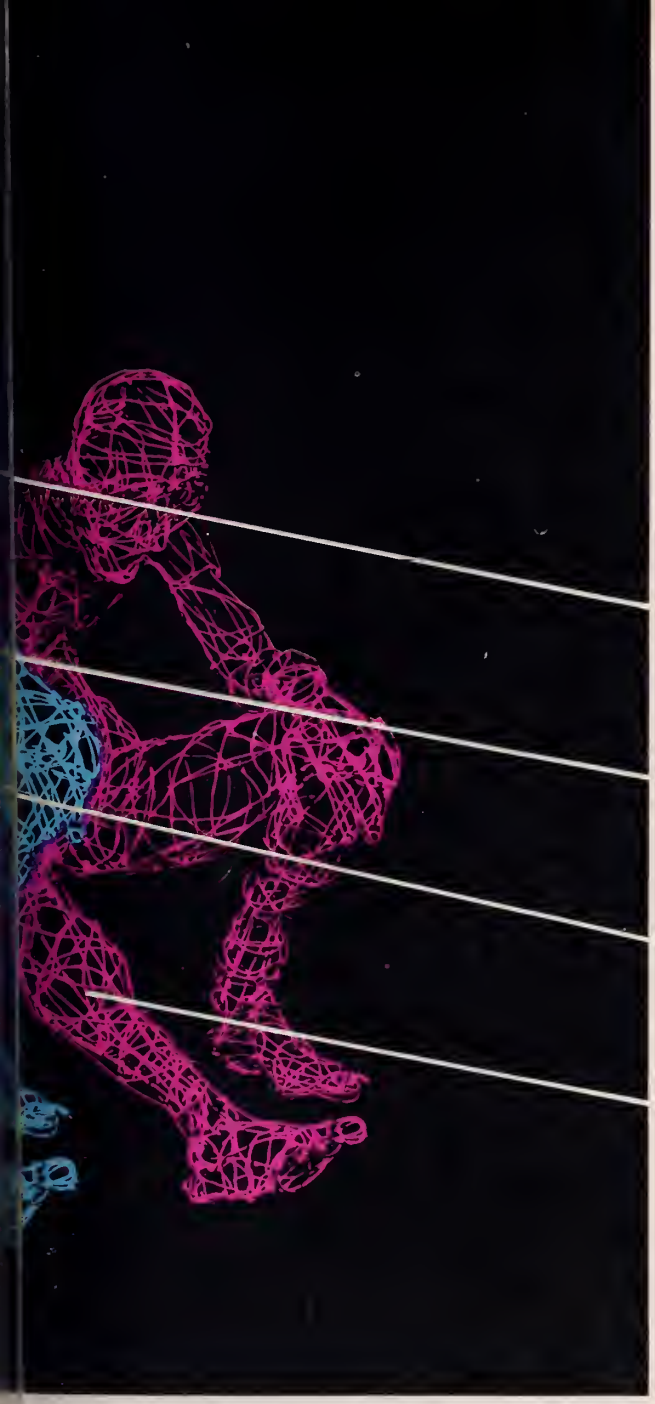
Indications: Trinsicon® (hematinic concentrate with intrinsic factor, Lilly) is a multifactor preparation effective in the treatment of anemias that respond to oral hematinics, Including pernicious anemia and other megaloblastic anemias and also iron-deficiency anemia.

Contraindications: Hemochromatosis and hemosiderosis.

Precautions: Anemia is a manifestation that requires appro investigation to determine its cause or causes.

In pernicious anemia, the use of folic acid without ad vitamin B_{12} therapy may result in hematologic remission bu rological progression. Adequate doses of vitamin B_{12} (pare or oral with potent intrinsic factor as in Trinsicon® [her concentrate with intrinsic factor, Lilly]) usually prevent, h improve the neurological changes.

As with all preparations containing intrinsic factor, resi may develop in some cases of pernicious anemia to the po tion of absorption of physiological doses of vitamin B_{12}. If s ance occurs, parenteral therapy, or oral therapy with so massive doses of vitamin B_{12}, may be necessary. No singl men fits all cases, and the status of the patient obser follow-up is the final criterion for adequacy of therapy. P



You can treat combined deficiencies with

Trinsicon®

—the multifactor hematinic

Vitamin B_{12} plus intrinsic factor (15 mcg. B_{12} activity)—helps provide adequate levels of this important vitamin.

Folic acid (1 mg.)—treats nutritional macrocytic anemias and/or malabsorption syndromes.

Ascorbic acid (75 mg.)—augments the conversion of folic acid to its active form and helps iron absorption.

Iron (110 mg.)—treats hypochromic anemia.

cal and laboratory studies are considered essential and are recommended.

Adverse Reactions: In rare instances, iron in therapeutic doses produces gastro-intestinal reactions, such as diarrhea or constipation. Reducing the dose and administering it with meals will minimize these effects.

In extremely rare instances, skin rash suggesting allergy has followed oral administration of liver-stomach material. Instances of apparent allergic sensitization have also been reported after oral administration of folic acid.

Dosage: One Pulvule twice a day. (Two Pulvules daily produce a standard response in the average uncomplicated case of pernicious anemia.)

How Supplied: Pulvules Trinsicon® (hematinic concentrate with intrinsic factor, Lilly), in bottles of 60 and 500. [032568]

Additional information available to physicians upon request.

Eli Lilly and Company, Indianapolis, Indiana 46206.

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Lilly

the antacid puzzle

In peptic ulcer:



solved by Mylanta®

aluminum and magnesium hydroxides *plus* simethicone

"will it ease the pain?"

Mylanta helps relieve ulcer pain with the two most widely prescribed antacids: aluminum and magnesium hydroxides.

will it help "my gassy stomach"?

Mylanta *also* contains simethicone: for concomitant relief of G.I. gas distress.

"will this one taste O. K.?"

The *prolonged* acceptance of Mylanta was recently confirmed in 87.5% of 104 patients—after a total of 20,459 documented days of therapy.* *Danhof, I. E.: Report on file.

Composition: Each Mylanta chewable tablet or teaspoonful (5 ml.) contains: magnesium hydroxide, 200 mg.; aluminum hydroxide, dried gel, 200 mg.; simethicone, 20 mg. *Dosage:* One or two tablets (well chewed or allowed to dissolve in the mouth) or one or two teaspoonfuls to be taken between meals and at bedtime.

Stuart

Division/Pasadena, Calif.
ATLAS CHEMICAL INDUSTRIES, INC.

Special Article

(Continued from Page 814)

retail service establishments. And our best advice is that they are.

This leaves only the "handling, selling or otherwise working on goods that have already moved in interstate commerce" as the area of real uncertainty in this entire matter, and then only with respect to physicians who dispense drugs or appliances *and* whose gross receipts now exceed $500,000 ($250,000 after February 1, 1969).

If any member whose office falls within that category wishes further information on his potential liability under the Fair Labor Standards Act, the Association will be pleased to open its files to him.

Public Health Page

(Continued from Page 799)

Regional Health Planning Councils will be established which, like their state counterpart, will have a majority of consumers as members.

It is reasonable to expect that such a sharing relationship between health professional and enlightened lay persons will point the way toward the type of health system that the people need and want without wasting scarce fiscal, material and human resources. It is not envisioned that state and regional planning bodies will usurp the operational planning of established official and voluntary agencies, established planning groups, and most certainly will not interfere with the private practice of medicine. It is to be hoped, however, that the seven hundred million dollar health industry can be planned for and planned into our overall development process. We have at hand the mechanism for a true partnership for health.

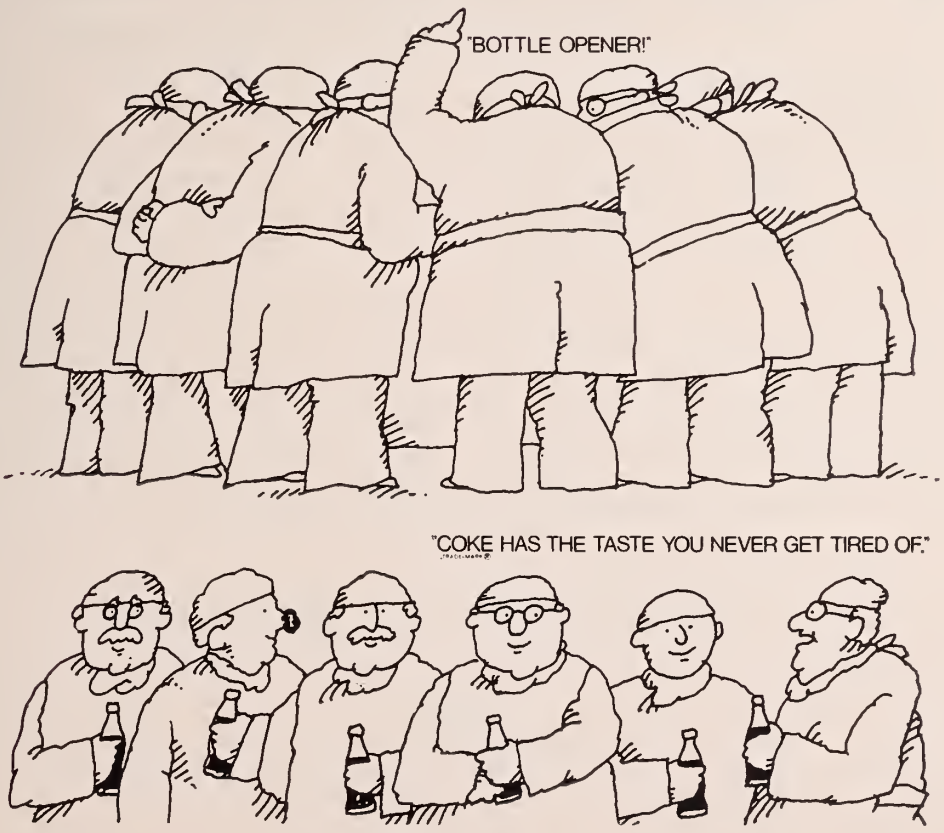
In The Books

(Continued from Page 778)

The sections on head and neck cancer are the most detailed in the book, probably because more integrated therapy has been accomplished in this field than in the others. The presentations on lung carcinoma are also quite good, but the chapter on esophageal cancer is treated somewhat superficially. The chapter on breast cancer offers encouragement for better survival with the use of radiation *before* mastectomy. However, a few more paragraphs might have been written to review the many therapeutic problems related to breast cancer and the need for a more logical approach to treatment.

The two chapters on carcinoma of the cervix are subject to reinterpretation. Integrated therapy should have more potential benefit in the advanced stages of this disease where surgery alone is seldom employed and radiotherapy has only limited success. Both papers derive most of their conclusions from the relatively localized stage I and II lesions where modern radiation treatment alone accomplishes better results with less morbidity than are made apparent in these articles.

HERBERT E. BRIZEL, M.D.



"COCA COLA" AND "COKE" ARE REGISTERED TRADE MARKS WHICH IDENTIFY ONLY THE PRODUCT OF THE COCA COLA COMPANY



"Now that your acne is clearing up nicely, it might be a good idea if you started losing some weight."

Get them while they're easily reversible.

Obesity doesn't happen suddenly. This insidious process has its beginning—and the chances of reversing it are better—during the *first 10 to 15 pounds of weight gain.* When a new dietary pattern must be established, consider the adjunctive use of BAMADEX SEQUELS. Combining the proven *anorexigenic* action of d-amphetamine with the *tranquilizing* effect of meprobamate, BAMADEX SEQUELS controls appetite throughout the day, usually with a single capsule daily.

Contraindications: Dextro-amphetamine sulfate: In hyperexcitability and in agitated prepsychotic states. Previous allergic or idiosyncratic reactions to meprobamate.
Precautions: Use with caution in patients hypersensitive to sympathomimetic compounds, who have coronary or cardiovascular disease, or are severely hypertensive.

Dextro-amphetamine sulfate: Excessive use by unstable individuals may result in psychological dependence.

Meprobamate: Careful supervision of dose and amounts prescribed is advised, especially for patients with known propensity for taking excessive quantities of drugs. Excessive and prolonged use in susceptible persons, e.g. alcoholics, former addicts, and other severe psychoneurotics, has been reported to result in dependence on the drug. Where excessive dosage has continued for weeks or months, reduce dosage gradually. Sudden withdrawal may precipitate recurrence of preexisting symptoms such as anxiety, anorexia, or insomnia; or withdrawal reactions such as vomiting, ataxia, tremors, muscle twitching and, rarely, epileptiform seizures. Should meprobamate cause drowsiness or visual disturbances, reduce dosage and avoid operation of motor vehicles, machinery or other activity requiring alertness. Effects of excessive alcohol consumption may be increased by meprobamate. Appropriate caution is recommended with patients prone to excessive drinking. In patients prone to both petit and grand mal epilepsy meprobamate may precipitate grand mal attacks. Prescribe cautiously and in small quantities to patients with suicidal tendencies.
Side Effects: Overstimulation of the central nervous system, jitteriness and insomnia or drowsiness. Dextro-amphetamine sulfate: Insomnia, excitability, and increased motor activity are common and ordinarily mild side effects. Confusion, anxiety, aggressiveness, increased libido, and hallucinations have also been observed, especially in mentally ill patients. Rebound fatigue and depression may follow central stimulation. Other effects may include dry mouth, anorexia, nausea, vomiting, diarrhea, and increased cardiovascular reactivity.

Meprobamate: Drowsiness may occur and can be associated with ataxia; the symptom can usually be controlled by decreasing the dose, or by concomitant administration of central stimulants. Allergic or idiosyncratic reactions: maculopapular rash, acute nonthrombocytopenic purpura with petechiae, ecchymoses, peripheral edema and fever, transient leukopenia. A case of fatal bullous dermatitis, following administration of meprobamate and prednisolone, has been reported. Hypersensitivity has produced fever, fainting spells, angioneurotic edema, bronchial spasms, hypotensive crises (1 fatal case), anuria, stomatitis, proctitis (1 case), anaphylaxis, agranulocytosis and thrombocytopenic purpura, and a fatal instance of aplastic anemia, but only when other drugs known to elicit these conditions were given concomitantly. Fast EEG activity, usually after excessive dosage. Impairment of visual accommodation. Massive overdosage may produce drowsiness, lethargy, stupor, ataxia, coma, shock, vasomotor and respiratory collapse.

Bamadex® Sequels®

Dextro-Amphetamine Sulfate (15 mg.) with Meprobamate (300 mg.) Sustained Release Capsules

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Pearl River, New York

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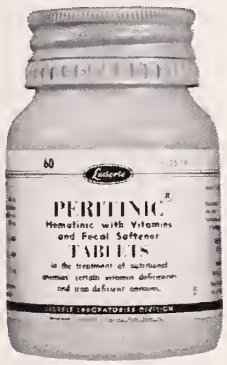
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Precautions: In the elderly and debilitated, and in children over six, limit to smallest effective dosage (initially 10 mg or less per day) to preclude ataxia or oversedation, increasing gradually as needed and tolerated. Not recommended in children under six. Though generally not recommended, if combination therapy with other psychotropics seems indicated, carefully consider individual pharmacologic effects, particularly in use of potentiating drugs such as MAO inhibitors and phenothiazines. Observe usual precautions in presence of impaired renal or hepatic function. Paradoxical reactions (*e.g.*, excitement, stimulation and acute rage) have been reported in psychiatric patients and hyperactive aggressive children. Employ usual precautions in treatment of anxiety states with evidence of impending depression; suicidal tendencies may be present and protective measures necessary. Variable effects on blood coagulation have been reported very rarely in patients receiving the drug and oral anticoagulants; causal relationship has not been established clinically.

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The Challenges We Face

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References:

(1) Siver, R. H.: CMD, *21*:109, September 1954. (2) Frykman, H. H.: Minn. Med., *38*:19-27, January 1955. (3) McGivney, J.: Tex. State Jour. Med., *51*:16-18, January 1955. (4) Quehl, T. M.: Jour. of Florida Acad. Gen. Prac., *15*:15-16, October 1965. (5) Weekes, D. J.: N.Y. State Jour. Med., *58*:2672-2673, August 1958. (6) Weekes, D. J.: EENT Digest, *25*:47-59, December 1963. (7) Abbott, P. L.: Jour. Oral Surg., Anes., & Hosp. Dental Serv., 310-312, July 1961. (8) Rapoport, L. and Levine, W. I.: Oral Surg., Oral Med. & Oral Path., *20*:591-593, November 1965.

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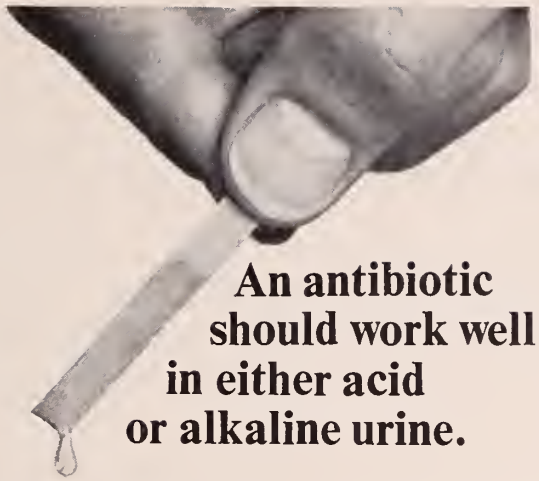
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Precautions: Overgrowth of nonsusceptible organisms may occur. Constant observation is essential. If new infections appear, appropriate measures should be taken. In infants, increased intracranial pressure with bulging fontanels has been observed. All signs and symptoms have disappeared rapidly upon cessation of treatment.

Side Effects: Gastrointestinal system – anorexia, nausea, vomiting, diarrhea, stomatitis, glossitis, enterocolitis, pruritus ani. Skin – maculopapular and erythematous rashes; a rare case of exfoliative dermatitis has been reported. Photosensitivity; onycholysis and discoloration of the nails (rare). Kidney – rise in BUN, apparently dose-related. Transient increase in urinary output, sometimes accompanied by thirst (rare). Hypersensitivity reactions–urticaria, angioneurotic edema, anaphylaxis. Teeth – dental staining (yellow-brown) in children of mothers given this drug during the latter half of pregnancy, and in children given the drug during the neonatal period, infancy and early childhood. Enamel hypoplasia has been seen in a few children. If adverse reaction or idiosyncrasy occurs, discontinue medication and institute appropriate therapy. Demethylchlortetracycline may form a stable calcium complex in any bone-forming tissue with no serious harmful effects reported thus far in humans.

Average Adult Daily Dosage: 150 mg q.i.d. or 300 mg b.i.d. Should be given 1 hour before or 2 hours after meals, since absorption is impaired by the concomitant administration of high calcium content drugs, foods and some dairy products. Treatment of streptococcal infections should continue for 10 days, even though symptoms have subsided.

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GRATITUDE. Humility. Awe.

These three words, I believe, best express my thoughts and my feelings when, on September 25, I accepted the gavel symbolic of the Presidency of the Kentucky Medical Association.

Gratitude for the honor you have conferred on me in selecting me as the constitutional leader of organized medicine in Kentucky—an honor which comes but once in a lifetime and one that, in the past, has been conferred on many of the great men of medicine in this Commonwealth.

Humility because of a feeling of unworthiness to be placed in the company of these great men, and the realization that there are many of my peers who are equally deserving of the honor and most capable of filling the office.

Awe as I reflect upon the job ahead—its magnitude, its responsibilities and its rewards.

With gratitude and humility, then, I undertake the awesome task as President of KMA with the realization that any successes which may come to our Association during the coming year will be due in but a small measure to my efforts but are totally dependent upon the continued dedication, cooperation and confidence of all of the members. This I most earnestly seek!

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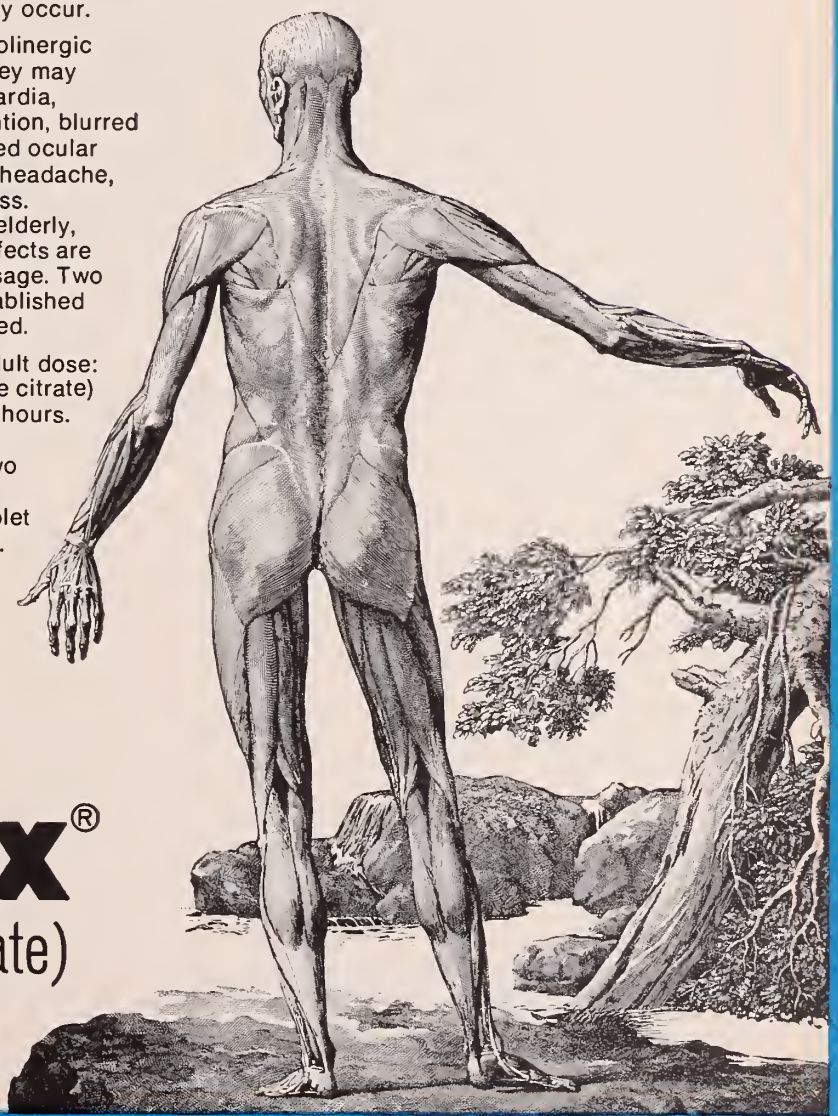
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INTERNAL MEDICINE BASED ON MECHANISMS OF DISEASE: edited by Peter J. Talso, M.D. and Alexander P. Remenchik, M.D.; Published by The C. V. Mosby Company, St. Louis, 1968; 797 Pages; Price $17.50.

The editors point out that extensive growth of medical knowledge has led to bulky textbooks which are physically inconvenient and limited to usefulness for the general study of internal medicine. The standard text is then relegated to the role of a reference source.

This book is an attempt to provide the student, generalist, and specialist with a "working textbook" for his every-day use. It is somewhat equally divided into seven sections. The first section describes the science and art of internal medicine and the second discusses basic mechanisms of disease. The last five sections deal with specific systems including heart and blood vessels, respiratory system, digestive system, metabolism and other fundamental diseases.

There are very few high points in this book. Notable exceptions are several tables included in the basic mechanisms section dealing with genetic principles and adrenal steroid chemistry. This section is concise, well written, and does provide useful information for thinking in general physiologic terms. The sections on diseases of various systems are limited by space requirements. Generally, these sections mention various disease states and problems without concomitant description of symptoms and mechanisms.

This book may be useful for purposes of broad review and stimulation of recall in the field of internal medicine. It does not seem to fill the answer for a "working textbook". There is relatively little to recommend it for the average student or physician's shelf.

WILL W. WARD, JR., M.D.

PEDIATRIC THERAPY (Third Edition): edited by Harry C. Shirkey, M.D.; Published by the C. V. Mosby Company, St. Louis, 1968; 1294 Pages; Price $25.00.

Any physician who treats infants and children will find the third edition of *Pediatric Therapy* a useful volume for reference and review. The author's experience in pharmacy, pharmacology, private practice and academic pediatrics is reflected in both a practical and authoritative text. Eighty-nine contributors are well-selected.

New chapters in this edition include the subjects of drugs excreted into breast milk, special care of newborns, systemic antimicrobial therapy, mycoplasma infections, special genitourinary disorders and the management of burns in children.

The section on adverse reactions to drugs should be read and remembered by physicians, nurses and pharmaceutical representatives.

Of the 351 illustrations many are photographs of patients or lesions and are interesting but are in no way instructive as to therapy. The graphs and tables are clearly presented.

A vast amount of information is contained in the 1294 pages of this book and it should be included in the "top ten" on the pediatrics book shelf.

WALTER T. HUGHES, M.D.

PRACTICAL AUTOMATION FOR THE CLINICAL LABORATORY: by Wilma L. White, et.al.; Published by The C. V. Mosby Company, St. Louis, 1968; 401 Pages; Price $14.50.

This book scarcely commends itself to the general readership of *The Journal*. It belongs rather to a smaller circulation of persons concerned specifically with laboratory work, and even eliminates many laboratories which are not in a position to afford the larger automated procedures.

At first glance of the somewhat limited group of users of automated equipment, this book seems to come as an answer to a prayer—that is, these machines suffer the idiosyncrasies of machines, and one much realize that one should not be the first to try the new nor the last to lay the old aside. However, when such efforts are undertaken, there are with such sophisticated pieces of equipment many problems, and automated equipment such as we are now dealing with in the laboratory requires expert wet nursing.

In this respect there are areas of this text that supply much needed information in a useful form. However, beyond this point the authors close their eyes to the deficiencies of the equipment and fail to elaborate some of these deficiencies. Actually, the piece of equipment that occupies much of the content of this book needs further changes in order to bring it out of the field of a large-population-sampling-or-screening piece into a more beneficial field committing not alone screening, but definitive results which can be used as a basis of comparison in the patient's progress and maintenance of health from year-to-year.

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"All Registered Nurses are Alike"

It stands to reason. They all go through the same training; they all have to pass the same tests: they all have to measure up to the same standards. Therefore, all registered nurses are alike.

That's nonsense, of course. But it's no more nonsensical than what some people say about aspirin. Namely: since all aspirin is at least supposed to come up to certain required standards, then all aspirin tablets must be alike.

Bayer's standards are far more demanding. In fact, there are at least *nine specific differences* involving purity, potency and speed of tablet disintegration. These Bayer® standards result in significant product benefits including gentleness to the stomach, and product stability that enables Bayer tablets to *stay* strong and gentle until they are taken.

So next time you hear someone say that all aspirin tablets are alike, you can say, with confidence, that it just isn't so.

You might also say that all registered nurses aren't alike, either.





"Upper respiratory infection! I thought everything was a 'virus' these days?"

Some U.R.I. patients are more miserable than others.

That's why we make Novahistine® in two different tablet formulations.

And let you control the dosage.

With Novahistine LP tablets and Novahistine Singlet™ tablets you have the range and flexibility of decongestant dosage that lets you prescribe for the needs of the individual patient.

Novahistine LP tablets are most useful for relief of nasal congestion in patients without pain or fever.

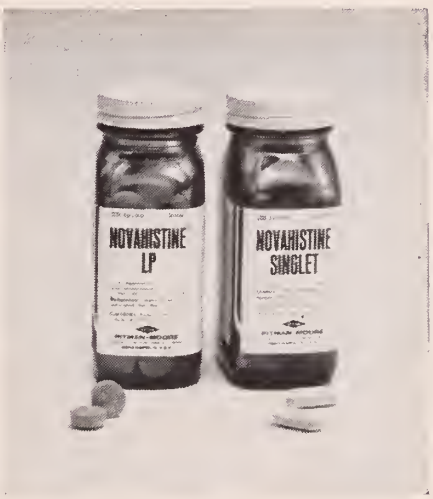
Novahistine Singlet tablets, which provide analgesic-antipyretic effect, as well as decongestant action, are indicated for upper respiratory infections accompanied by pain, aches and fever.

Whether you prescribe Novahistine LP or Novahistine Singlet, a total daily dose of 3 or 4 tablets will usually provide effective, continuous relief.

Use cautiously in patients with severe hypertension, diabetes mellitus, hyperthyroidism or urinary retention. Caution ambulatory patients that drowsiness may result.

Each Novahistine LP tablet contains phenylephrine hydrochloride, 25 mg.; and chlorpheniramine maleate, 4 mg.

Each Novahistine Singlet tablet contains phenylephrine hydrochloride, 40 mg.; chlorpheniramine maleate, 8 mg.; and acetaminophen, 500 mg.



DOW PITMAN-MOORE DIVISION OF THE DOW CHEMICAL COMPANY, INDIANAPOLIS



THE INSURANCE PAGE



Blue Shield's Role in Title XIX Is Growing

BLUE Shield plans are playing an increasingly important role in the Title XIX federal-state matching programs for the indigent and medically indigent. Latest reports show Blue Shield plans in 14 states participating in these Medicaid programs. Many other Blue Shield plans are seeking Title XIX roles.

The Texas Plans are handling the program on a modified prepayment basis, while the other plans have been retained in an administrative capacity.

In a special Title XIX conference sponsored by the National Association of Blue Shield Plans and the Blue Cross Association in November, 1967, NABSP President John W. Castellucci and BCA President Walter McNerney issued a joint statement urging the appropriate state agencies to contract with Blue Shield and Blue Cross for the underwriting of Medicaid benefits on a prepaid basis.

"We believe that Blue Shield and Blue Cross Plans provide the logical mechanisms for making Medicaid work the way the law intended," the association heads declared. "If Title XIX Medicaid programs are purchased from the local Blue Shield and Blue Cross Plans, this will not only provide sound budget forecasting which is so essential today, it will offer many advantages to the needy and near-needy people served by the programs."

The idea of Blue Shield underwriting Medicaid benefits drew an enthusiastic note of support from Senator Carl T. Curtis (R-Nebraska) during hearings before the Senate Finance Committee: "This means that state agencies in charge of Medicaid programs could purchase medical services on a premium basis, thus assuring the state of a predictable cost, plus the inestimable benefit of the experience and skills of the Blue Shield Plans in administering these vital medical care programs."

Similarly, Francis L. Land, M.D., commissioner of the Medical Services Administration, Social and Rehabilitation Services, who is in charge of the federal aspects of Medicaid, endorsed the Blue Shield and Blue Cross prepayment approach for Title XIX programs. Advising Blue Shield and Blue Cross Plans to assist state agencies in the implementation of Medicaid programs, Doctor Land recommended the development of a model contract to prevent any misunderstanding on the part of the state agency or the plan. As a result, NABSP has drawn up a "Model Title XIX Fiscal Agent Contract."

It is clear that Blue Shield, because of its unique characteristics and relations with physicians, is ideally suited to represent the voluntary sector in government-funded health care programs. This approach is favored as an economical, efficient and realistic alternative. It will preserve the freedom of the medical profession, it will discourage duplication of effort, and it will keep the beneficiaries of the system in the mainstream of health care.

WILLIAM W. HALL, M.D.

Q. How much does the **anticostive*** **hematinic** cost?

A. No more than costive hematinics cost!

The anticostive hematinic is

PERITINIC®

Hematinic with Vitamins and Fecal Softener

A tablet-a-day provides:

● Elemental Iron (as Ferrous Fumarate)	100 mg
● Dioctyl Sodium Sulfosuccinate (to counteract constipating effect of iron)	100 mg
Vitamin B_1	7.5 mg
Vitamin B_2	7.5 mg
Vitamin B_6	7.5 mg
Vitamin B_{12}	50 mcgm
Vitamin C	200 mg
Niacinamide	30 mg
Folic Acid	0.05 mg
Pantothenic Acid	15 mg

Bottles of 60

* anticostive, *adj.* (*anti* opposed to + *costive* causing constipation.) Against constipation. Now isn't that a good idea in an iron-containing hematinic?

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A Division of American Cyanamid Company
Pearl River, New York 10965



After the picnic even Gramps Was a victim of intestinal cramps

Parepectolin for quick relief of acute diarrhea
...soothes colicky pain with paregoric*
...consolidates fluid stools with pectin
...adsorbs irritants with kaolin, and protects intestinal mucosa

In elderly patients it is particularly important to stop the diarrhea fast. Parepectolin helps you control diarrhea promptly and gain the patient's confidence until etiology has been determined.

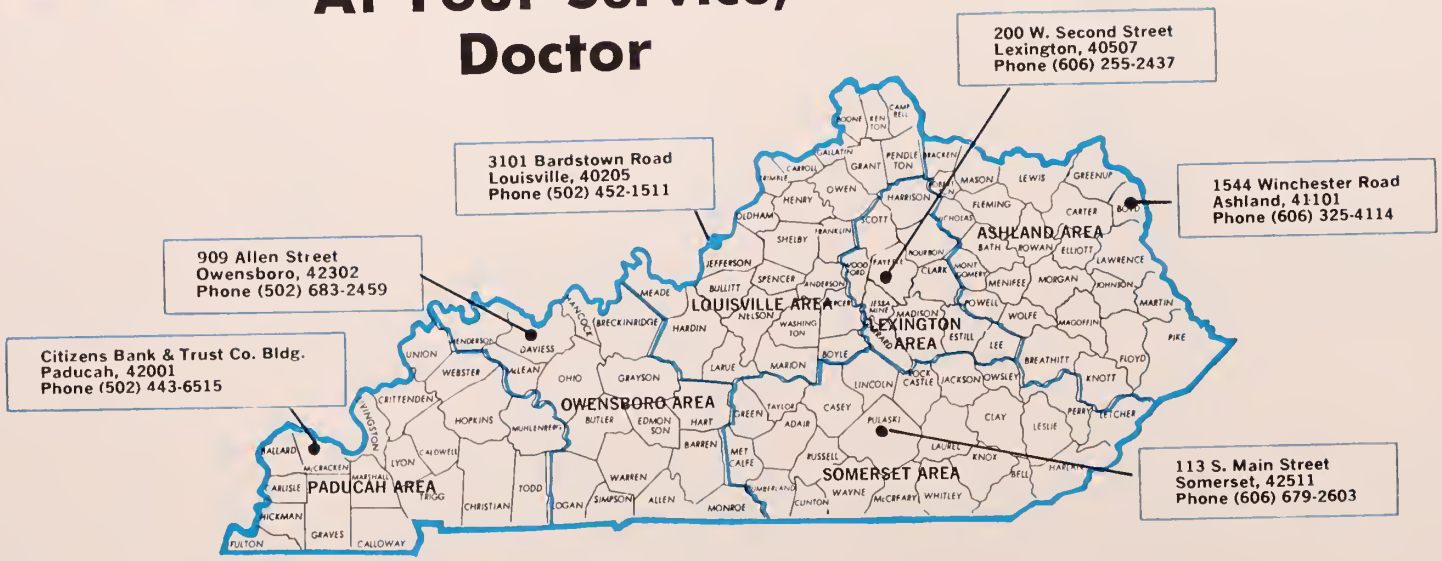
Parepectolin®

Each fluid ounce of creamy white suspension contains:
*Paregoric (equivalent) ..... (1.0 dram) 3.7 ml.
Contains opium (¼ grain) 15 mg. per fluid ounce.
warning: may be habit forming
Pectin ..... (2½ grains) 162 mg.
Kaolin (specially purified) .... (85 grains) 5.5 Gm.
(alcohol 0.69%)
Usual Adult Dose: One or two tablespoonfuls three times daily.

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Fort Washington, Pa.

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At Your Service, Doctor



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® Registered service marks of the American Hospital Association

(PLEASE REMOVE THIS PAGE FOR FUTURE REFERENCE)



When she gets a bacterial infection, think of Tetrex-F.®

Like the debilitated or diabetic patient, she may be susceptible to monilial overgrowth.

That's why she needs the extra protection of Tetrex-F whenever tetracycline therapy is indicated. Tetrex-F provides well-tolerated tetracycline phosphate complex for the bacterial infection—nystatin to help prevent monilial overgrowth.

Tetrex-F®

(tetracycline phosphate complex-nystatin)

Whenever monilia may threaten tetracycline therapy

PRESCRIBING INFORMATION. For complete information consult Official Package Circular. *Indications:* Infections of respiratory, gastrointestinal and genitourinary tracts and skin and soft tissues due to tetracycline-sensitive organisms, in patients with increased susceptibility to monilial infections. *Contraindications:* The drug is contraindicated in patients hypersensitive to its components. *Warnings:* Photodynamic reactions have been produced by tetracyclines. Natural and artificial sunlight should be avoided during therapy. Stop treatment if skin discomfort occurs. With renal impairment, systemic accumulation and hepatotoxicity may occur. In this situation, lower doses should be used. Tooth staining and enamel hypoplasia may be induced during tooth development (last trimester of pregnancy, neonatal period and childhood). *Precautions:* Bacterial superinfections may occur. Infants may develop increased intracranial pressure with bulging fontanels. In gonorrheal therapy, serologic tests for syphilis should be conducted initially and monthly for 3 months. *Adverse Reactions:* Glossitis, stomatitis, nausea, diarrhea, flatulence, proctitis, vaginitis, dermatitis, and allergic reactions may occur. *Usual Adult Dosage:* 1 capsule q.i.d. Continue for 10 days in Beta-hemolytic streptococcal infections. Administer one hour before or two hours after meals. *Supplied:* Capsules, bottles of 16 and 100. Each capsule contains tetracycline phosphate complex equivalent to 250 mg. tetracycline HCl activity and 250,000 units of nystatin. For Oral Suspension, 125 mg. tetracycline and 125,000 u. nystatin/5 ml., 60 ml. bottles. **A.H.F.S. Category 8:12**

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Division of Bristol-Myers Co.
Syracuse, New York 13201

You be the judge, Doctor



ummation:
addition to its primary indications for duodenal
d gastric ulcer, Robinul Forte (glycopyrrolate)
indicated for other G-I conditions that may
nefit from anticholinergic therapy. Robinul-PH
rte (glycopyrrolate 2 mg. with phenobarbital)
indicated when these situations are complicated
mild anxiety and tension.

ontraindications: Glaucoma, urinary blad-
r neck obstruction, pyloric obstruction, stenosis
th significant gastric retention, prostatic
pertrophy, duodenal obstruction, cardiospasm
egaesophagus), and achalasia of the esophagus,
d in the case of Robinul-PH Forte, sensitivity
phenobarbital.

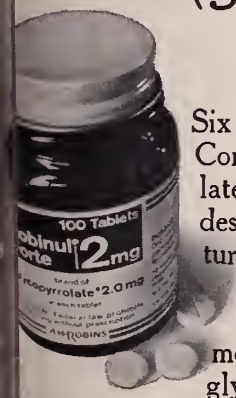
recautions: Administer with caution in the
esence of incipient glaucoma.

dverse Reactions: Dryness of the mouth,
urred vision, urinary difficulties, and constipa-
n are rarely troublesome and may generally be
ntrolled by reduction of dosage. Other side
ects associated with the use of anticholinergic
ugs include tachycardia, palpitation, dilatation
the pupil, increased ocular tension, weakness,
usea, vomiting, headache, dizziness, drowsi-
ss, and rash.

osage: Should be adjusted according to indi-
dual patient response. Average and maximum
commended dose is 1 tablet three times a day;
the a.m., early p.m., and at bedtime. See
oduct literature for full prescribing information.
pply: Robinul (glycopyrrolate 1 mg.): Robinul
rte (glycopyrrolate 2 mg.): Robinul-PH (glyco-
rrolate 1 mg.) with phenobarbital 16.2 mg.
Warning: may be habit forming); Robinul-PH
rte (glycopyrrolate 2 mg.) with phenobarbital
.2 mg. (Warning: may be habit forming), in
ttles of 100 and 500 tablets. A. H. Robins
mpany, Richmond, Va. 23220.

A·H·ROBINS

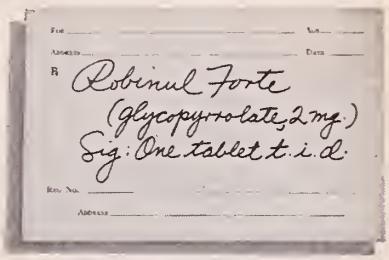
In peptic ulcer therapy, won't you give Robinul® Forte a Fair Trial?
(glycopyrrolate)



Six years ago the A. H. Robins Company introduced glycopyrrolate, a unique anticholinergic agent described in the prescribing literature as more closely approaching the ideal compound for controlling gastric hyperacidity and hypermotility of the G-I tract. Although glycopyrrolate (Robinul Forte) found good acceptance among numerous physicians, many others just didn't seem to want to give it a try, probably because the anticholinergic they were already using was giving acceptable results.

However, we believe you'll agree there's always room for a better anticholinergic. This is why we're asking you to give Robinul Forte a fair trial. Robinul Forte exerts a highly specific antisecretory action and marked inhibitory effect on intestinal tone. We're confident you'll agree that this is indeed an outstanding drug when you observe its outstanding suppression of ulcer symptoms. Furthermore, it is unique in that it reduces intestinal tone, yet has little or no effect on peristalsis. In addition, the incidence of the more bothersome peripheral side effects is low.

No longer does the physician have to look for extreme dry mouth as the measure of his anticholinergic's effectiveness. The only way we can demonstrate to you firsthand the efficacy of glycopyrrolate (Robinul Forte) is for you to try it in your practice. That's why we're asking you to give it a Fair Trial. How can you give it a Fair Trial? You do it this way:



First: When you see your very next ulcer patient, write him a script as shown.

Next: Wait 10 days or until your patient comes in for his next appointment and get his "verdict" as to how he feels. Examine all the evidence and make your evaluation of his condition.



Finally: Render **your** verdict. If it's "significant improvement and marked relief of symptoms," then we believe you'll agree that Robinul Forte has proved its worth, and we rest our case. If not, consider our case for Robinul Forte closed. That's a Fair Trial, Doctor, and it's all we ask.

Robinul® Forte
(glycopyrrolate, 2 mg.)

The summation is an important part of every case. You'll find ours on the preceding page, Doctor.

Continuing Educational Opportunities

From The

KMA Postgraduate Medical Education Office

IN KENTUCKY

OCTOBER

16-17 Home Care Conference, location to be announced, Louisville

24 Chemical Industry Workshop on Occupational Health, Executive Inn, Louisville

24 Annual L. E. Smith Memorial Lecture, 5 p.m. University of Kentucky Medical Center, Lexington

NOVEMBER

8-9 Kentucky Thoracic Society, Fall Conference, Gabe's Motor Inn, Owensboro

12-13 "Small-for-Date Infant Symposium," department of pediatrics, University of Louisville School of Medicine, Stouffer's Inn, Louisville

13-16 "Initial Emergency Care and Transportation of the Sick and Injured," 3-1/2 day course, University of Kentucky, Lexington

IN SURROUNDING STATES

OCTOBER

16-17 Update 1968—Selected Topics in Nursing, Cleveland Clinic Educational Foundation, Cleveland, Ohio

19-24 American Academy of Pediatrics, 37th Annual Meeting, Palmer House Hotel, Chicago, Ill.

31-Nov. 2 American college of Gastroenterology Annual Course in Postgraduate Gastroenterology, Statler Hilton, Boston, Mass.

NOVEMBER

1-2 "Diagnostic Radiology and the Practicing Physician," Kehoe Hall, University of Cincinnati College of Medicine, Cincinnati, Ohio

6-7 Cleveland Clinic Educational Foundation Postgraduate Course "Upper Gastrointestinal Tract Disease—Clinical Aspects", Cleveland, Ohio

7-9 Second Annual Conference, "Today's Hospital Problems," Mound Park Hospital Foundation, Tides Hotel and Bath Club, Redington Beach, Fla.

11-15 American Public Health Association Annual Meeting, Cobo Hall, Detroit, Mich.

18-21 Southern Medical Association Annual Meeting, New Orleans, La.

DECEMBER

1-4 American Medical Association, Annual Clinical Convention, Miami Beach, Fla.

9-11 Southern Surgical Association Meeting, Boca Raton Hotel, Boca Raton, Fla.

SEND IN MEETING INFORMATION

Many medical organizations are setting dates for their winter and spring meetings. At the same time they are choosing the topics to be discussed, arranging for speakers and planning programs.

The Continuing Medical Education office of the Kentucky Medical Association would like to urge these societies and organizations to notify this office of these dates and topics so they can be added to the "Continuing Education Opportunities" calendar in *The Journal*. In this way conflicts in dates can be avoided and a wider audience can be informed of these upcoming meetings.

Please send such information, when available, to the KMA Continuing Medical Education Office, 3532 Janet Avenue, Louisville, Ky. 40205.

A once-popular treatment for back pains was to have the seventh son of a seventh son stand or walk on the patient's back.





The pain of earache was allegedly relieved by holding a hot roasted onion to the ear.

or headache, a sovereign remedy was o wear a snakeskin round one's head.



A realistic approach to pain relief



'Empirin'®

Compound with Codeine Phosphate gr. 1/2 No. 3

Each tablet contains:
Codeine Phosphate gr. 1/2 (Warning—May be habit forming), Phenacetin gr. 2 1/2, Aspirin gr. 3 1/2, Caffeine gr. 1/2.

Keeps the promise of pain relief

B.W. & Co.' narcotic products are Class "B", and as such are available on oral prescription, where State law permits.

BURROUGHS WELLCOME & CO. (U.S.A.) INC.
Tuckahoe, N.Y.

New

Therapeutic breakthrough in non-narcotic control of the pain of

Tegretol®
carbamazepine

trigeminal neuralgia

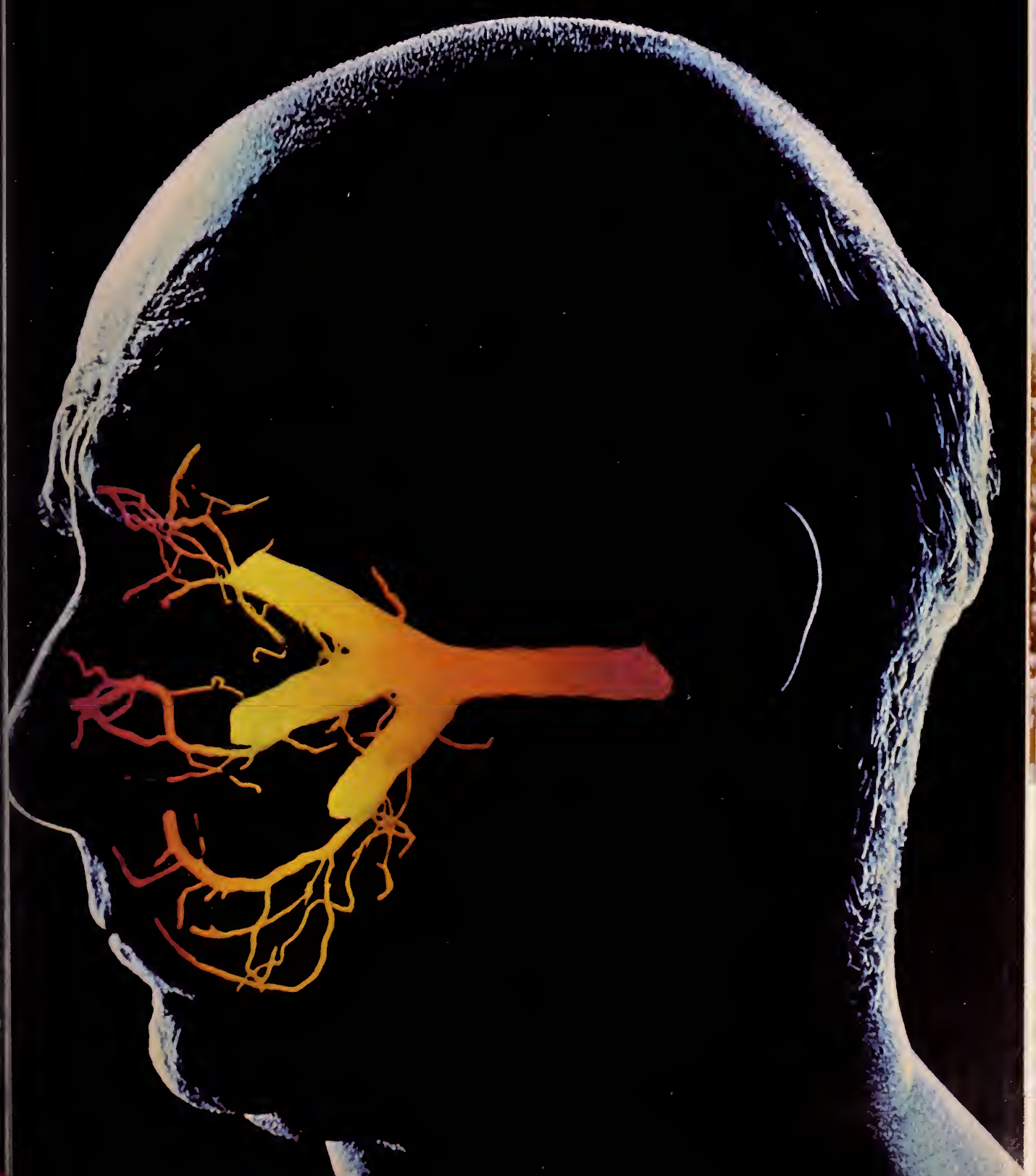
Warning
Fatal cases of aplastic anemia have been reported following treatment with Tegretol. Agranulocytosis, thrombocytopenia and transitory leukopenia have also been observed.
Complete blood and platelet counts should be done prior to and at regular intervals during treatment with the drug (see recommendations under "Important Note and Precautions") to help in the early detection of serious bone marrow injury. Abnormalities in initial blood tests should rule out use of the drug. Also, patients should be made aware of such early toxic signs of a potential hematologic problem as fever, sore throat, mouth ulcers, easy bruising and petechial or purpuric hemorrhage. Should such signs appear, the patient should be advised to discontinue the drug and to report to the physician immediately.

Indication Tegretol is indicated in the treatment of the pain associated with true trigeminal neuralgia. It is not a simple analgesic and should never be administered for relief of trivial facial aches or pains.
Contraindication Do not use in those with a known sensitivity to any tricyclic compound or in those being treated with M.A.O.I. agents. As long a period as possible should elapse before using Tegretol in patients who have been treated with M.A.O.I.'s, with a minimum of 7 days. In such cases, initial dosage should be low and the patient's reaction to gradual increments closely observed.
Important Note and Precautions Familiarity with the clinical symptoms which lead to an accurate diagnosis of true trigeminal neuralgia and with the complete prescribing information, careful patient selection, a thorough examination before treatment and close patient supervision throughout the treatment period are essential to the safe and effective use of this drug.
Where feasible, Tegretol should not be used in conjunction with any potent drug which may increase the possibility of toxic reactions.
In pregnancy, the drug should not be prescribed during the first trimester and thereafter only to patients in whom the clinical situation warrants the potential risk. It should not be administered to nursing mothers.
Patients with increased intraocular pressure should be closely observed during treatment with this drug because of its anticholinergic effect.
Because of the drug's relationship to other tricyclic compounds, the possibility of activation of latent psychosis and, in the elderly, of confusion or agitation, should be considered.
Dizziness and drowsiness may occur and patients should be cautioned about the hazards of operating machinery or automobiles and of engaging in other hazardous tasks.
Use cautiously in patients with a history of coronary artery disease, organic heart disease, congestive failure or liver disease.
Before initiating therapy, the following laboratory procedures should be performed:
1. Complete blood and platelet counts which, if abnormal, should rule out the use of the drug.
2. Baseline evaluations of liver function.
During treatment with Tegretol, the following laboratory procedures should be performed:
1. Complete blood and platelet counts should be done at intervals of one week during the first month of drug treatment, every two weeks during the second and third months, and at monthly intervals thereafter for as long as the patient is taking the drug. A trend toward a decreasing white blood cell count should suggest a dosage reduction and more frequent laboratory and clinical evaluations. Should this trend continue, the should be discontinued.
2. Liver function tests must be performed at regular intervals durin ment with this drug since liver damage may occur during therapy. drug should be discontinued immediately in cases of aggravated l dysfunction or active liver disease.
3. Periodic eye examinations, including slit-lamp, funduscopy and t etry, are recommended for patients being treated with this drug si many phenothiazines and related drugs have been shown to cause changes.
4. Complete urinalysis and BUN should be done on patients treat Tegretol because of observed renal dysfunction.
Adverse Reactions Dizziness, drowsiness, unsteadiness on the fe nausea, vomiting, aplastic anemia, transitory leukopenia, agranulo eosinophilia, leukocytosis, thrombocytopenia, purpura, abnormalit liver function tests, cholestatic and hepatocellular jaundice, urinar quency, acute urinary retention, oliguria with elevated blood press albuminuria, glycosuria, elevated BUN, microscopic deposits in th impotence, disturbances of coordination, confusion, headache, fat blurred vision, transient diplopia and oculomotor disturbances, sp disturbances, abnormal involuntary movements, peripheral neuritis paresthesias, depression with agitation, talkativeness, nystagmus, nitus, paralysis and other symptoms of cerebral arterial insufficien pruritic and erythematous rashes, urticaria, Stevens-Johnson synd photosensitivity reactions, alterations in skin pigmentation, exfolia dermatitis, alopecia, diaphoresis, recurrence of thrombophlebitis, multiforme and nodosum, aggravation of disseminated lupus eryth tosus, gastric distress, abdominal pain, diarrhea, constipation, an dryness of the mouth and pharynx, glossitis, stomatitis, fever, chill adenopathy, lymphadenopathy, aching joints and muscles, leg cra conjunctivitis, left ventricular failure, aggravation of hypertension, tension, syncope and collapse, edema, aggravation of coronary ar disease and congestive heart failure. (Whether these cardiovascul are drug-related is not known. However, some of these complicati resulted in fatalities.) The necessity for discontinuing the drug sh dictated by the gravity and severity of the adverse reactions.
Dosage and Administration The drug should always be taken with if possible.
Initial: One-half tablet (100 mg.) b.i.d. on the first day. Thereafter, should be increased in one-half tablet (100 mg.) increments every until freedom from pain is achieved. To relieve pain, between 200 1200 mg. per 24 hours may be necessary.
Maintenance: Initial control of pain can be maintained in most pa with a dose of 400 mg. to 800 mg. daily. Maintenance doses may r between 200 mg. and 1200 mg. daily.
At least once every 3 months during treatment period attempts sh made to discontinue the drug or to reduce the dose to the minimu effective level.
Availability Round, white, single-scored tablets of 200 mg. in bo of 100 and 1000. (B)46-
For complete details, please see Prescribing Information.

Geigy Pharmaceuticals
Division of Geigy Chemical Corporation
Ardsley, New York 10502

Ge

uncommon relief of uncommon pain



The Divorced Depressive: "Forty, Forgotten"

"Had a large wedding."
"Had a fine home and family."



TO-5757

„Forlorn"

d a divorce."
a real loser,
d so are
e kids."



The loss of marital compatibility results in nearly 500,000 U.S. divorces each year.

Depression characterized by untold guilt feelings, grief and loneliness may follow.

When you diagnose depression, Tofrānil may be indicated for relief.

As maintenance therapy during the active phase of depression, Tofrānil can often help prevent relapse.

The use of Tofrānil in patients receiving M.A.O.I.'s is contraindicated. In patients with cardiovascular disease, thyroid disorders, increased intraocular pressure; in those receiving anticholinergics (including antiparkinsonism agents), thyroid medication or antihypertensive adrenergic neuron-blocking agents; and in those in their first trimester of pregnancy–the special precautions listed in the Prescribing Information should be carefully observed.

Toxic reactions severe enough to require discontinuation of Tofrānil are uncommon. However, for complete details, please refer to the complete Prescribing Information.

Turn page for brief summary of Prescribing Information.

in depression

Tofrānil® imipramine hydrochloride
Geigy

in depression





Tofrānil® Geigy

imipramine
hydrochloride

Tofrānil®, imipramine hydrochloride
Indications: Tofrānil is recommended for the treatment of depressive states of diverse psychopathology.
Contraindications: The concomitant use of this agent and monoamine oxidase inhibiting (M.A.O.I.) compounds is contraindicated. Hyperpyretic crises or severe convulsive seizures may occur. Potentiation of adverse effects can be serious or even fatal. An interval of at least 7 days after M.A.O.I. therapy has been discontinued should be allowed before this drug may be substituted. Initial dosage should be low, increases should be gradual, and the patient's progress should be carefully observed.
Warning: Clinical reports have suggested that there may be a risk of teratogenesis associated with the use of this compound during the first trimester of pregnancy. Unless, in the opinion of the prescribing physician, the potential benefits outweigh the possible risks, it should not be used during the first trimester of pregnancy. Cardiovascular complications, including myocardial infarction and arrhythmias, have occasionally occurred in susceptible individuals. Patients with cardiovascular disease should be given the drug only under careful observation and in low dosage.
Precautions: Since suicide is always a possibility in severely depressed patients and one which may persist until significant remission occurs, such patients should be carefully supervised during early treatment. Some severely depressed patients may also require hospitalization and/or concomitant electroconvulsive therapy. Because of its anticholinergic effect, caution should be observed in prescribing the drug for patients with increased intraocular pressure.
In rare instances, transient cardiac arrhythmias have occurred in hyperthyroid patients and in patients receiving thyroid medication when this compound was added to the regimen. Imipramine may block the pharmacologic activity of guanethidine and other related adrenergic neuron-blocking agents.
The drug is not recommended at the present time in patients under 12 years of age.
Adverse Reactions: Dryness of the mouth, tachycardia, constipation, disturbances of accommodation, sweating, dizziness, weight gain, urinary frequency or retention, nausea and vomiting, peripheral neuritis, mild parkinson-like syndrome, tremors, rare cases of falling in elderly patients, confusional states (with such symptoms as hallucinations and disorientation), activation of psychosis in schizophrenics and agitation (including hypomanic and manic episodes) which may require dosage reduction and/or addition of a tranquilizer or temporary discontinuation of the drug, epileptiform seizures, orthostatic hypotension and substantial blood pressure fall in hypertensive patients, purpura, transient jaundice, bone marrow depression including agranulocytosis, sensitization and skin rash including photosensitization, eosinophilia, and mild withdrawal symptoms on sudden discontinuation after prolonged treatment with high doses. Occasional hormonal effects (impotence, decreased libido, and estrogenic effects) may be observed. Atropine-like effects may be more pronounced (e.g. paralytic ileus) in susceptible patients and in those using anticholinergic agents (including antiparkinsonism drugs).
Outpatient Adult Dosage: Initially, 75 mg. daily, increased, if necessary, to 150 or 200 mg. Maintenance dosage may be lower, 50 to 150 mg. daily, if possible.
Geriatric and Adolescent Dosage: Initially, 30 or 40 mg. daily, which may be increased according to response and tolerance. It is usually unnecessary to exceed 100 mg. daily.
A lag in therapeutic response, lasting from a few days to a few weeks, should be expected. When dosage recommendations are already being followed, increasing the dosage does not normally shorten this latency period and may increase the incidence of adverse reactions.
Availability: Round tablets of 25 and 50 mg.; triangular tablets of 10 mg. for geriatric and adolescent use; and ampuls, each containing 25 mg. in 2 cc. for I.M. administration.
(B)R-46-850-C

For complete details, please refer to the full Prescribing Information.

Geigy Pharmaceuticals
Division of Geigy Chemical Corporation
Ardsley, New York 10502

TO-6757



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no Kentucky physician can afford!

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MEDICAL SCHOOL NEWS AND VIEWS

Rhetoric Versus Research in Medical Education Part Two†

Richard N. Watkins*

OBVIOUSLY, the Kentucky College of Medicine needs what it does not have—a committee devoted to assimilating research and innovations in medical education and propagating that information to the Kentucky medical community. It seems inevitable that medical centers should have personnel whose specific task is to gather and assimilate current concepts informing medical education itself, just as the faculty in a given specialty serve to assimilate new concepts within that medical specialty. Such a function cannot develop overnight, but certainly we can begin. This mandate belongs to the faculty of the Medical Center.

But there is a special lesson here for the students. The frustration which they feel, the doubts about the relevancy of the time they spend on apparently arbitrary minutiae, and their desires to evaluate and change what should be changed — these energies should be channeled into the constructive and satisfying task of disciplined research on the relevance of the medical curriculum in their own school. Why might not the Kentucky students, many of whom spend the summer in some form of research, finance through interested agencies, design with the aid of the Departments of Behavioral Science and Community Medicine, and themselves execute summer research projects focused on their own education and its goals?

Last year, for example, because of requests by students, a course in medical aspects of sexuality was included in the freshman elective curriculum. This summer, six students executed a study which probed the incidence of patient requests for sexual counseling and the extent to which Kentucky physicians consider themselves responsible and sufficiently prepared in this area. The answers to these questions should inform future curricular policy at Kentucky. As an example of a potential project, the neuroanatomy course at Kentucky could be evaluated by determination of the level of neuroanatomical knowledge used by the various types of Kentucky practioner. Usually, the course and examination are the yardstick for the student. In such a project, the physician would become the yardstick for the course and examination. In some open-ended fields, such as cell biology, another variable — future development — must be introduced into the judgment of the course. But in a traditional, long-tested, and almost closed discipline such as neuroanatomy, with a minimum of judgmental content and a maximum of factual content, the present practice of physicians is very nearly an adequate yardstick.

There is here, in addition to the mandate for the Kentucky students and faculty, a mandate for the Kentucky practitioner, for without his understanding and cooperation no study of current Kentucky medicine is possible. The concept of the end product, the practitioner, must inform all our innovations in education.

If this synergy is achieved—the faculty in assimilating current educational research, the students in assessing their own education, and the practitioners in contributing to such study — then we need perpetrate no longer what is an absurdity in our times: to allow the formation of the physician to depend upon intuition, rhetoric, and opinion; and yet to consider medical practice based solely upon such methods not only old-fashioned, but an intellectual and moral lapse.

†*The first part of this two-part article appeared in the September, 1968 issue of The Journal, page 792*

**Junior, University of Kentucky College of Medicine*

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Renovascular Hypertension: Experience With Seven Cases Treated Surgically†

William R. Jernigan, M.D., F.A.C.S., William C. Gardner, M.D. and F. F. Ferguson, M.D.

Madisonville, Kentucky

The method of selection of candidates for surgery, the surgical procedures used, the results obtained, the lessons learned are briefly described. Suitable candidates are few, but nearly all are cured or benefited.

THE purpose of this paper is to present seven patients, treated surgically, for renovascular hypertension. Although the results of treatment of this small group compare favorably with larger series, no statistical conclusions can be drawn. The number of cases is obviously too small and the period of follow-up too short.

On all patients, causes of secondary hypertension such as coarctation of the aorta, pheochromocytoma, primary aldosteronism and Cushing's disease were ruled out by appropriate examinations or laboratory procedures. The workup on these patients also included the hypertensive IVP or rapid sequence IVP and aortography. Translumbar aortograms were used early, but more recently transfemoral aortography with multiple films taken at one-half second intervals has proved to produce studies of superior quality and is now used routinely unless specifically contraindicated.

Split renal function studies were done on selected patients utilizing small ureteral catheters and calculating the sodium-creatinine ratio. This method has been reliable and has not produced the morbidity usually seen with the Howard test.

Pressure gradient studies were done at surgery on patients with bilateral lesions to determine, if possible, which renal artery was responsible for the hypertension. Pressure gradient studies correlate so well with split renal function studies[2] that they are not done routinely, but only when split renal function studies are equivocal or there are bilateral lesions.

We have had no experience with renal scan, radio-active Hippuran studies, or renal vein bio-assay for renin, but will probably use them when they become available at our hospital.

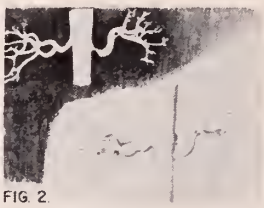
Case Report

Case #1: O.H., a 40-year-old colored female, was known to have hypertension eight months with no response to drugs. Preoperative blood pressure was 190/130. Hypertensive IVP shows the right kidney to be 2 cms. smaller than the left with delayed excretion. Split renal function studies were unsuccessful. The aortogram shows a stenotic lesion of the right renal artery. On May 26, 1964, endarterectomy

†*From the department of surgery, Trover Clinic, and the surgical service, Hopkins County Hospital, Madisonville, Kentucky. Presented before the Bowers Surgical Society, Memphis, Tennessee, October, 1967, and the Kentucky Chapter, American College of Surgeons, Lexington, Kentucky, April, 1968*

with vein patch graft was performed. (Figure 1)* Postoperative blood pressure ranges from 110/70 to 120/80.


FIG. 1.


FIG. 2.

Case #2: W. L., a 64-year-old white male, had been hypertensive about one year. The preoperative blood pressure was 220/120 and on medication 140/80. The hypertensive IVP shows the left kidney 1 cm. smaller with delayed excretion. The aortogram shows a stenotic lesion of the left renal artery. On April 30, 1965, excision of stenotic lesion and end-to-side anastomosis to the aorta was carried out. (Figure 2) Postoperative blood pressure was 200/100. On medication, postoperatively the patient's pressure came to 150/80.

Case #3: B. F., a 40-year-old white female, was hypertensive one year prior to surgery. There was a right upper quadrant bruit on physical examination. The preoperative blood pressure was 220/120 with no response to drugs. The hypertensive IVP shows the right kidney 1 cm. smaller than the left. Aortogram shows fibromuscular hyperplasia of the right renal artery. On July 6, 1965, aorta to right renal artery by-pass vein graft was done. (Figure 3) Postoperative blood pressure ranges from 130/84 to 140/90.

Case #4: G.M., a 45-year-old white female, had a bruit in the left upper quadrant on physical examination. The duration of her hypertension was four years. The preoperative blood pressure was 210/130, and on drugs 150/90. The hypertensive IVP shows the right kidney 2 cms. smaller than the left. The aortogram shows bilateral fibromuscular hyperplasia. (Figure 4) Split renal function studies demonstrated a very low sodium-creatinine ratio bilaterally, but with no significant difference between the kidneys. On April 18, 1966, a splenic to left renal artery end-to-side anastomosis, and aorta to right renal artery autogenous splenic arterial graft was performed. (Figure 5) Pressure gradient studies at surgery showed a gradient of 100 mm. of mercury on the right and 60 mm. of mercury on the left. Postoperative blood pressure has ranged from 130/90 to 150/100.


FIG. 3.


FIG. 4.

In the accompanying illustrations, the silhouettes are from actual tracings of angiograms. In each instance, the related drawing represents the corrective surgical procedure performed.

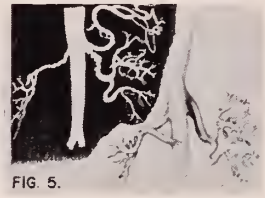
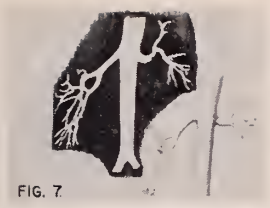
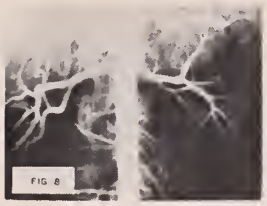

FIG. 5.


FIG. 6.

Case #5: T. G., a 25-year-old white female, was noted on a hospital admission two years prior to surgery to be normotensive with a normal IVP. On re-admission two years later for a D & C, the patient was discovered to have a blood pressure of 190/140 to 230/130. The hypertensive IVP shows a small left kidney with an ischemic band noted on the nephrogram. The aortogram demonstrates complete occulsion of the lower segmental branch of the left renal artery. (Figure 6) On May 22, 1967, the patient underwent arteriotomy and vein patch graft of the left lower segmental artery. (Figure 7) An aortogram three months postoperative proves the small segmental artery to be open. (Figure 8) The postoperative blood pressure ranges from 130/90 to 100/70.

Case #6: G.G. is a 51-year-old white female who had documented hypertension for over seven years. The preoperative blood pressure ranged from 220/120 to 190/110 with little response to drugs. The hypertensive IVP was normal with no discrepancy in kidney size or function. The aortogram shows fibromuscular hyperplasia of the right renal artery and a stenotic lesion of the left renal artery thought to be fibromuscular hyperplasia. (Figure 9) Pressure gradient studies at surgery showed no gradient between either renal artery and the aorta. Aorta to right renal artery autogenous by-pass vein graft with lysis of a fibrinous band of the proximal left renal ar-


FIG. 7.


FIG. 8

tery was carried out June 26, 1967. (Figure 10) Postoperative blood pressure was 230/120, and on antihypertensive drugs 180/110. Two months postoperatively, the patient developed an acute myocardial infarction and congestive heart failure postponing re-evalution of her hypertension. She requires high doses of antihypertensive drugs to control her blood pressure. On January 25, 1968, a postoperative aortogram was performed. The stenotic lesion of the left renal artery is no longer present and the vein graft to the distal right renal artery is patent. The lower segmental branch is no longer visualized and the proximal right renal artery is thrombosed. (Figure 11) The patient's hypertension was responding poorly to drugs and it was uncertain if the hypertension was due to the thrombosed right segmental artery, or to bilateral parenchymal disease. This patient was admitted to University Hospital, Lexington, Kentucky, February 25, 1968, where blood samples were taken from both renal veins for bio-assay of renin. These were 400 nanograms percent on the right, and 390 nanograms percent on the left, indicating bilateral renal involvement due to parenchymal disease.

Case #7: C. F., a 69-year-old white male, had hypertension for an unknown length of time, but documented hypertension for more than three years. The preoperative blood pressure was 230/120. Physical examination revealed a pulsating mass in the abdomen. Chest X-ray demonstrated a calcified ventricular aneurysm and the patient had distal arterial occulusive disease in the lower extremities, below the popliteals. He had had a previous myocardial infarction. Hypertensive IVP shows the left kidney smaller by 1 cm. with slower

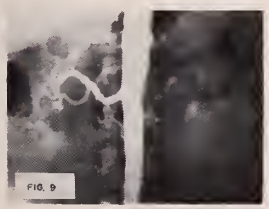

FIG. 9


FIG. 10.

excretion. Split renal function studies show a very low sodium-creatinine ratio bilaterally, but with no difference between the kidneys. The aortogram shows marked bilateral renal artery stenosis with an abdominal aortic aneurysm. The patient's BUN was 26 mgs. percent. The abdominal aortic aneurysm was resected September 7, 1967, with a dacron graft and bilateral by-pass dacron grafts to the distal renal arteries. (Figure 12) Postoperative blood pressure ranged from 180/108 to 160/100, and with mild antihypertensive drugs blood pressure is 156/84. Complications were an ischemic left foot requiring A-K amputation and acute myocardial infarction in the immediate postoperative period. This patient died suddenly at home four months postoperatively—a post mortem exam was not obtained.

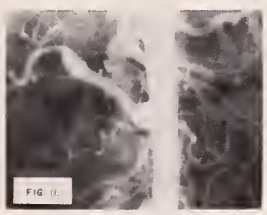

FIG. 11.


FIG. 12.

Discussion

Cases #1, 3, 4 and 5 had specific renal artery lesions producing hypertension which were corrected by appropriate reconstructive procedures. Blood pressure promptly returned to normal levels and they have remained normotensive from 10 months to three years and 10 months. (Figure 13)

Case #2—a male in the sixth decade of life with hypertension, well controlled on medication. Diastolic blood pressure was lowered by 20 mm. of mercury after surgery, but the patient still required mild antihypertensive medications. (Figure 13) In retrospect, this patient received little benefit from surgery and could easily have been managed medically.

Case #7 was not operated on primarily for hypertension. (Figure 13) The abdominal aortic aneurysm at surgery proved to be very thin walled, and rupture was imminent. The stenotic lesions of both renal arteries were so marked that complete occlusion by thrombosis was feared. Also, renal function was borderline with a BUN of 26 mgs. percent. It was hoped that renal function could be improved by the bilateral renal artery procedure. The diastolic blood pressure was reduced 15mm. of mer-

SUMMARY · RENOVASCULAR HYPERTENSION

CASE	AGE	SEX	ETIOLOGY	PREOP. BP.	PREOP. RESPONSE TO DRUGS	DURATION OF HYPERTENSION	POSTOP. BP.	POSTOP. RESPONSE TO DRUGS	LENGTH OF FOLLOW - UP
1	40	F	arteriascler – otic plaque	190/130 220/130	none	8 months	110/70 120/80	not treated	40 months +
2	64	M	orteriascleratic plaque	220/120	140/80 150/90	12 months +	200/100	150 80	31 months +
3	40	F	fibromuscular hyperplasia	220/120	none	12 months	130/84	not treoted	24 months +
4	45	F	fibromusculor hyperplasia	220/130	150/90	48 months	130/90 150/90	not treated	18 months +
5	25	F	endothelial hyperplasia	230/130	not treated	12 months	110/70 130/90	not treoted	6 months +
6	51	F	fibromusculor hyperplasia	220/120	not treated	84 months	230/120 190/110	180 110	5 months +
7	69	M	orteriosclerotic ploque	220/120	190/110	36 months	180/108 160/100	not treoted	2 months +

FIGURE 13.

cury and the systolic blood pressure 40 to 50 mm. of mercury by the surgical procedure on a short-term follow-up of four months. This patient demonstrates the multiple and serious complications frequently encountered in this age group with generalized disease. This patient died four months following surgery after apparent recovery, presumably due to myocardial infarction.

Case #6 is the only case considered a complete surgical failure. (Figure 13) The IVP showed equal kidney size and function. No pressure gradient was demonstrated at surgery. This plus the fact the patient received no benefit from surgery suggests this patient's hypertension might be due to causes other than the renal artery lesions demonstrated on aortogram. The renin bio-asssay studies done at Lexington also support this conclusion. Certainly, our dilemma with this case may well have been unnecessary had we done bilateral kidney biopsies at surgery. Renal biopsies will be done at surgery on all future cases.

Conclusion

Vascular procedures on the renal arteries are perhaps the most difficult of peripherovascular operations. The renal arteries are difficult to expose, and frequently it is necessary to anastomose to very small segmental vessels. Risk of postoperative thrombosis and worsening of the patient's condition is great. There are numerous ways to revascularize a kidney and the procedure of choice is the procedure which lends itself well to a particular case. Five different methods of revascularization were employed in these seven patients. In general, prosthetic material is not used except when absolutely essential. Bilateral lesions are usually approached at one operation. Careful selection of cases is essential for good results and often poor results can be seen in retrospect to be due to poor patient selection. In general, we agree with Dustan, et al,[1] that surgical treatment seems indicated in patients well enough to withstand the procedure and young enough to obtain long-range benefit

(Continued on page 918)

Aneurysms of the Ascending Aorta With Aortic Valve Incompetence†

Lester R. Bryant, M.D., J. Kent Trinkle, M.D.
and Ralph Shabetai, M.D.

Lexington, Kentucky

Six patients with ascending aortic aneurysm and aortic valve incompetence have been operated upon at the University of Kentucky Hospital since 1964. Presence of the associated aneurysm may not be suspected from routine studies. Effective treatment requires aneurysmectomy and aortic valve replacement.

ASCENDING aortic aneurysm with associated incompetence of the aortic valve is a serious lesion with an ominous prognosis if left untreated.[1,2] Death occurs from left ventricular failure due to the valvular incompetence, from rupture of the aneurysm into adjacent structures or into the pericardium, or from intramural dissection of the aorta.

The etiologic agents responsible for this lethal combination include atherosclerosis, syphilis, cystic medial necrosis, trauma, sepsis, and giant cell aortitis.[3] Morphologically, the aneurysm usually begins at the aortic valve annulus and terminates at a variable point proximal to the origin of the innominate artery. Aneurysmal dilatation limited to the proximal ascending aorta is characteristic for the patients with cystic medial necrosis, but it may extend into the aortic arch in those with syphilis or atherosclerosis. With progressive enlargement the aneurysm extends anteriorly, superiorly, and to the right, partially compressing the superior vena cava and right atrium. Dilatation of the aortic annulus is the most frequent cause of the associated valvular incompetence, but fibrosis and shortening of the cusps are seen occasionally.

Until recently, the risk of surgical treatment was almost as great as the natural mortality of the disease. Improved techniques of cardiopulmonary bypass, however, and the development of prosthetic grafts and valves have provided favorable results with acceptable mortality. This report summarizes our experience with six patients who have undergone aneurysmectomy and aortic valve replacement at the University of Kentucky Hospital in the past three years.

Clinical Material

Six patients were subjected to diagnostic work-up and operation during the period December 1964 to November 1967. The five men and one woman ranged in age from 36 to 57 years (mean 44.3 years). One man was a Negro, and the remaining patients were Caucasian. The woman had Marfan's syndrome diagnosed in 1962 at another institution. At that time she was treated successfully for subacute bacterial endocarditis with residual mitral insufficiency. One man, age 47 years, had undergone resection of a coarctation of the aorta 10 years earlier. Another man, age 57 years, was reported to have had a myocardial infarction eight years before admission to this hospital. Three of the men had been treated for syphilis at least six years before their present illnesses.

The clinical manifestations are summarized in Table 1. All patients were symptomatic with the duration of symptoms ranging from 24 hours to eight months. Three of the four pa-

TABLE 1

Clinical Manifestations of Ascending Aortic Aneurysm and Aortic Valve Incompetence in 6 Patients

Chest pain	4 patients
Dyspnea	4
Congestive failure	4
Syncope	1
Cardiomegaly	5
Aortic diastolic murmur	6
Diastolic pressure below 60 mm Hg	6

†*From the departments of surgery and medicine, University of Kentucky Medical Center, Lexington, Kentucky. Presented in part at the Annual Meeting, Kentucky Chapter, American College of Surgeons, Lexington, Kentucky, April, 1968*

tients with chest pain as a presenting complaint had episodic retrosternal discomfort described as a dull ache. The pain had no clear relation to activity and varied in duration from minutes to hours. Severe retrosternal pain with neck radiation for 24 hours, and widening of the mediastinum on the admission chest radiograph suggested the diagnosis of acute aortic dissection in the woman with Marfan's syndrome. (Figures 1a, 1b, 1c) Immediate operation was performed after emergency aortogram demonstrated an aneurysm of the proximal ascending aorta with aortic regurgitation.

Dyspnea at rest or with slight exertion, pulmonary rales, neck vein distention, and peripheral edema or hepatomegaly were present at the time of admission in four of the six patients. Cardiomegaly was present also with the apical impulse at the anterior axillary line. Three of the patients responded to intensive treatment for their congestive failure before cardiac catheterization was performed. The fourth patient with congestive failure was subjected to emergency operation as descibed above. Precordial discomfort was the principle complaint in the two patients without evidence of myocardial decompensation, and one had experienced several syncopal attacks.



Figure 1. (a.) Widening of the mediastinal shadow in the region of the ascending aorta is indicated by the arrow. The woman, known to have Marfan's syndrome since 1962, was admitted after 24 hours of severe retrosternal pain.



Figure 1. (b.) An emergency aortogram demonstrated a typical "florence flask" aneurysm of the proximal ascending aorta with aortic regurgitation.

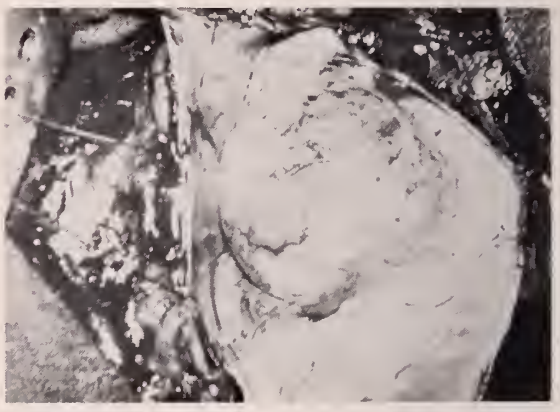


Figure 1. (c.) An operative photograph of the aneurysm in the woman with Marfan's syndrome.

A typical diastolic murmur of aortic incompetence was heard in all six patients, and four had an aortic systolic murmur as well. Three patients had a systolic murmur suggestive of mitral incompetence but only one (the woman with Marfan's syndrome) was proved to have mitral insufficiency. The diastolic blood pressure was less than 60 mm Hg in all six patients, and the average blood pressure for the group was 130/45 mm Hg. The electrocardiogram showed sinus rhythm in all six patients and left ventricular hypertrophy in five. First degree A-V block was present in four, and left bundle branch block in two.

Left ventricular enlargement was evident on the chest radiographs of five patients, but the presence of an ascending aortic aneurysm was suggested in only three. In two other patients

a thin rim of calcium was shown in what appeared to be a dilated ascending aorta. The serologic test for syphilis (VDRL) was reactive in all three patients who had been treated for syphilis.

Cardiac catheterization was performed in five patients and cardiac output was reduced significantly in three. Pulmonary artery pressure was increased in three patients with a range of 30/12 to 65/30 mm Hg. Left ventricular end-diastolic pressure and the pulmonary-capillary wedge pressure were elevated to an average value of 18 mm Hg.

Surgical Considerations

The operative approach was through a median sternotomy in all six patients. Cardiopulmonary bypass was performed at moderate hypothermia (30-32°) with a disc oxygenator primed with heparinized blood. During open aortotomy the coronary arteries were perfused at flow rates of 150-300 ml/min. The average duration of cardiopulmonary bypass was two hours and 36 minutes.

The aneurysm began at the aortic root in all patients and ended 1 to 4 cm. proximal to the innominate artery origin. Encroachment of the aneurysm on the pulmonary artery, superior vena cava, and right atrium was present in each case, and the maximum diameters of the aneurysms varied from 8 to 15 cm. After cardiopulmonary bypass was started, the aorta was cross-clamped just proximal to the innominate artery and the aneurysm was opened. The wall was excised except in those areas where it was tightly attached to the pulmonary artery and superior vena cava. In all patients the aortic valve cusps were excised and replaced with a Starr-Edwards aortic valve prosthesis.

Woven grafts of Teflon, 1.25 in. in diameter, or of Dacron, 35 mm. in diameter were used to replace the ascending aorta. Generally, the proximal anastomosis was performed first. Involvement of the sinuses of Valsalva by the aneurysm required considerable gathering of the aortic side for the proximal anastomosis with the graft. Following completion of the distal anastomosis and discontinuation of cardio-pulmonary bypass, cardiac action was satisfactory in all six patients. Tracheostomy was performed at the end of operation, or after 24-48 hours of mechanical ventilation through a nasotracheal tube in three patients.

Pathology

The aneurysms were thin-walled and none contained laminated blood clot. Calcium was grossly visible in the aneurysm of two patients. The aneurysm from the woman subjected to emergency operation showed two areas of old dissection and a fresh transverse tear through the intima and media with early dissection. Microscopic examination of this aneurysm, and those from two of the men showed the typical changes of cystic medial necrosis. Of the remaining three aneurysms, two showed pathological evidence of luetic aortitis, and one demonstrated only atherosclerosis.

As determined at operation, marked dilatation of the aortic annulus was the cause of aortic incompetence in four patients. In these, the thin valve leaflets were elongated and appeared to prolapse into the aortic root during diastole. Microscopic examination of these cusps showed only degeneration. The aortic valve was bicuspid in the remaining two patients with thickening, fibrosis and focal calcification.

Results

All six patients survived operation and five were discharged from the hospital. The one early death occurred in a 45-year-old man who succumbed to hepatic and renal failure on the 21st postoperative day. His circulatory status was satisfactory until the development of pulmonary edema as a terminal event. Permission for autopsy was not granted.

A second death in the series occurred in a 57-year-old man who was readmitted to the hospital two months following operation because of an intracerebral hemorrhage. The differential diagnosis included bacterial infection of the prosthetic valve, cerebral embolus from the valve, and spontaneous intracerebral bleeding due to sodium warfarin therapy. He expired within a few days after admission and postmortem examination was not performed.

Four patients had complications in the early postoperative period. In three there was persistent loss of blood through the chest tubes which required reopening of the sternotomy incision within 24 hours after operation. The bleeding was from the sternal marrow cavity in two, and from an internal thoracic artery

in the third. Infection of the sternotomy wound in the fourth patient required prolonged hospitalization for debridement and antibiotic treatment.

At present, four of the six patients are alive with an average follow-up of 21.2 months. Cardiac status is essentially normal in three with no limitation of activity. The patient with Marfan's syndrome had moderate disability, partly on the basis of her residual mitral valve incompetence. Although this was known to be present at the time of emergency aneurysmectomy, intraoperative measurements of left atrial pressure suggested that the degree of incompetence did not merit the added risk of concomitant mitral valve replacement.

Comment

Diagnosis of aortic valvular incompetence based on physical findings is relatively straightforward. The presence of an associated ascending aortic aneurysm, however, may not be suspected from the patient's symptoms or from standard diagnostic procedures. The routine chest radiograph suggested an aneurysm in only three of the six patients. A history of syphilis, and retrosternal pain or discomfort, with or without evidence of calcium in the ascending aorta by chest X-ray may suggest the diagnosis. These findings may all be absent, however, in a patient with aneurysm due to cystic medial necrosis. Only one patient in this group had the skeletal abnormalities of Marfan's syndrome, but the recognized association of aortic dissection due to cystic medial necrosis with this syndrome facilitated early diagnosis and emergency operation. The occurrence of this type of aortic degeneration in the other two patients of this group probably represents a "forme fruste" of the Marfan's syndrome.[4,5]

Effective treatment of patients with ascending aortic aneurysm and valvular incompetence requires complete resection of the aneurysm and total correction of the valvular insufficiency. Although techniques have been described for resuspending the aortic cusps and avoiding valve replacement in some patients[6], this had not been possible in our experience. The danger of incomplete correction of valvular incompetence has led us to implant a prosthetic valve in each patient. This has provided an immediately competent valve which we consider important to survival in the early postoperative period.

References

1. Friedberg, C. K.: Syphilis of the Heart and Aorta in *Diseases of the Heart*, Chapt. 36, W. B. Saunders Co., Philadelphia, 1966.
2. Roark, J. W.: The Marfan's Syndrome. *Arch. Int. Med.* 103:123, 1959.
3. Austen, W. G., and Blennershassett, J. B.: Giant-Cell Aortitis Causing an Aneurysm of the Ascending Aorta and Aortic Regurgitation. *New Eng. J. Med.* 272:80, 1965.
4. Golden, R. L., and Lakin, H.: The Forme Fruste in Marfan's Syndrome. *New Eng. J. Med.* 260:797, 1959.
5. Weaver, W. F., Edwards, J., and Brandenburg, R. O.: Idiopathic Dilatation of the Aorta With Aortic Valvular Insufficiency. A Possible Forme Fruste of Marfan's Syndrome. *Proc. Mayo Clin.*, 34:518, 1959.
6. Gerbode, F., Semb, G. S., Hill, J., and Kerth, W.: Aneurysm of the Ascending Aorta. A Method of Reconstructing the Aortic Root. *Ann. Thorac. Surg.* 2:525, 1966.

Manuscript Memos

Manuscripts should be submitted in duplicate to The Journal of KMA, an original copy and one carbon and typed with double spacing. Maximum length of an article should not exceed 4500 words; the Board of Consultants on Scientific Articles prefers that they be briefer than this when possible.

In submitting a manuscript, the author is requested to include a concise summary, not to exceed 35 words, to be used as a sub-title when the article is published in The Journal. The purpose of the summary is to create additional interest and encourage greater readership.

Footnotes and bibliographies should conform to the style of the Quarterly Cumulative Index Medicus published by the American Medical Association. This requires in the order given: name of author, title of article, name of periodical, with volume, page, month—day of month if weekly—and year. The Journal of the KMA does not assume responsibility for the accuracy of references used with scientific articles.

All scientific material appearing in The Journal is reviewed by the Board of Consultants on Scientific Articles. The editors may use up to six illustrations, with the essayist bearing the cost of all over three one-column halftones.

Arrangements for reprints of an article should be made directly with the publisher of The Journal, Gibbs-Inman Printing Company, 817 W. Market St., Louisville, Ky.

The bylaws of the Kentucky Medical Association provide that all scientific discussions and papers read before the KMA Annual Meeting shall be referred to the KMA Journal for consideration for publication. The bylaws further state that the editor or the associate editor may accept or reject these papers as it appears advisable and return them to the author if not considered suitable for publication.

Please mail your scientific articles to The Journal of the Kentucky Medical Association, 3532 Janet Ave., Louisville, Kentucky 40205.

Contre-Coup Renal Artery Thrombosis
A Hitherto Unreported Entity

W. Neville Caudill, M.D.* and Larry J. Hrdlicka, M.D.**
New Orleans, Louisiana

A unique form of renal injury emphasizes the necessity of considering urinary tract involvement in cases of blunt trauma to the trunk.

THE hazards of blunt trauma to the abdominal and retroperitoneal organs are well recognized. The purpose of this communication is to report a unique injury secondary to blunt trauma, but, more importantly, to call attention to the necessity of complete investigation of all cases of potentially severe trauma to the trunk.

Case Report

A. E., (#169965), a 22 year old Norwegian seaman was admitted to the New Orleans Public Health Service Hospital at 9:30 p.m., May 18, 1966. About an hour earlier, he had fallen into the hold of his ship, a distance of 30 feet, striking the left side of his body and head. He lost consciousness briefly and was brought to the hospital by his shipmates. On admission he complained only of pain in his left back and left hip. Other than an appendectomy in 1951, his past history and review of systems were unremarkable.

His temperature was 98.6 degrees, pulse 82, blood pressure 105/70. Pertinent physical findings were a three-inch left temporal scalp laceration and ecchymoses over the left lateral iliac crest and the left greater femoral trochanter. There was some tenderness over the left 10th, 11th, and 12th ribs in the posterior axillary line. The abdomen was soft without palpable masses. Bimanual palpation of both flanks revealed tenderness only in the left loin. Neurological examination was entirely normal.

The patient was admitted to the hospital for observation, and x-rays of the skull, chest and lower left ribs demonstrated no abnormality. A plain film of the abdomen revealed a fracture of the left transverse process of L4. The renal outlines were poorly seen but the psoas margins were sharp bilaterally.

The hematocrit was 41%, hemoglobin 13.6 gm.% and the white cell count 8,500. The urine sediment contained only a rare white and red cell per high power field and there was one plus albuminuria.

Over the next 24 hours he remained comfortable except for soreness in the left lumbar area and over the left hip. The evening of May 19, however, he spiked a temperature to 102 degrees.

On re-examination there was slight abdominal guarding with tenderness in the left lumbar muscles. No flank masses were palpable. The hemoglobin was 12.8 gm.% and hematocrit 37%. The white count was 8,700. An IVP was ordered because of the possibility of injury to the left kidney. After injection of contrast medium there was prompt function and a normal appearing kidney on the left. The right side did not visualize, even though delayed films were obtained up to 12 hours. The following morning cystoscopy was performed and the bladder interior was normal with clear efflux from the left ureteral orifice and no apparent efflux from the right. A right retrograde pyelogram demonstrated a normal right collecting system.

Because of the normal appearance of the right renal collecting system a vascular injury to the right kidney was suspected and a transfemoral retrograde aortogram was performed. (Figure 1) A radiolucent filling defect was

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Figure 1. Aortogram demonstrating radiolucent filling defect in midpo:tion of right renal artery with slowed transit of contrast agent into the right kidney as compared with the normal left.

seen in the mid-portion of the right renal artery, incompletely obstructing its lumen.

The patient was taken to the operating room with the preoperative diagnosis of right renal artery thrombosis. At laparotomy, the intra-abdominal organs were normal. Through a small posterior peritoneal incision the right renal artery was isolated at its take-off from the aorta and an umbilical tape was placed around it for future reference. The ascending colon was mobilized medially, exposing the right retroperitoneum. The kidney was mottled purplish-black with scattered patches of pink. The fat in the region of the midportion of the renal artery was slightly blood-stained, and dissection of the artery in this area revealed a 0.75 cm. segment which was swollen and purple. After placing a vascular clamp proximally, a longitudinal arteriotomy was made and the expected thrombus was removed from the arterial lumen. Attempts at simple closure of the arteriotomy and resection of the injured segment with arterial reanastomosis failed to provide adequate pulsations in the artery even though the anastomosis was demonstrated to be patent. In addition, there was no appreciable change in the color of the kidney with release of the vascular clamp. It was felt that infarction had already proceeded to the point that the renal arterial flow would not be sufficient to prevent thrombosis and complete infarction. A nephrectomy was performed.

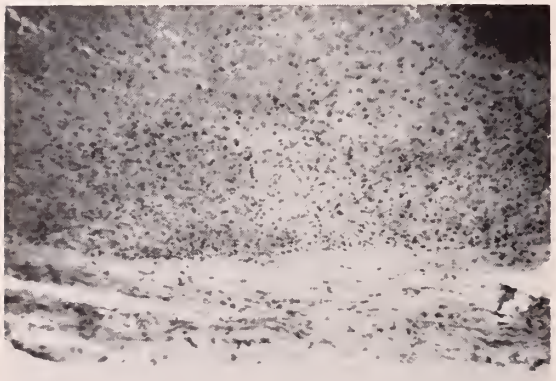


Figure 2. Section of right renal artery demonstrating organizing thrombus extending deep into the media.

Pathologic examination of the kidney revealed diffuse infarction necrosis. Sections of the involved renal artery demonstrated intramural thrombosis deep into the media of the vessel. (Figure 2)

Discussion

That the direction of force in this case was to the left side is well documented by both the history and physical examination. A plain film of the abdomen confirmed this and tended to indicate that the resultant injury was confined to that side. There have been several cases of traumatic renal artery thrombosis reported in the literature[1,2,3] and in those reports describing the mode of injury, there was trauma to the affected side. This, then, is the first reported case of documented contre-coup renal artery thrombosis.

The most common renal injuries result from crushing or shearing forces which cause parenchymal fracture or vascular avulsion. These usually produce signs (hematuria, flank mass, falling hematocrit) which lead to early suspicion and diagnosis of renal injury.

We suggest that the pathogenesis of traumatic renal artery thrombosis is different and results from force applied in the long axis of the artery resulting in sudden traction (or torsion) of the artery (modifying slightly Collins' explanation of such injuries[4]). In our specific case we postulate an intial compression of the kidney toward the left on impact, with subsequent sudden rebound to the right producing a "whiplash" type of traction on the artery. The more elastic outer arterial coats are resilient enough to withstand this force, but the relatively inelastic intima fractures with resultant subintimal dissection of blood and mural thrombus formation. This pathologic feature was demonstrated in the renal artery from our case and was noted in all of the other reported cases of traumatic thrombosis in which patho-

(Continued on page 920)

DOCTOR

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KENTUCKY THORACIC SOCIETY CONFERENCE ON RESPIRATORY DISEASES

November 8 and 9

Gabe's Motor Inn—Owensboro, Kentucky

FRIDAY, NOVEMBER 8

5:30 p.m. "Get Acquainted" Social Hour

6:30 p.m. Dinner

E. R. Gernert, M.D., President, Presiding

"The Enigma of Airway Obstruction"

Roger S. Mitchell, M.D., Director
Webb-Waring Institute for Medical Research
Denver, Colorado

SATURDAY, NOVEMBER 9

9:00 a.m. "Functional Defects in Chronic Airway Obstruction"

Robert Penman, M.D.
Associate Professor of Medicine
University of Kentucky Medical Center

9:40 a.m. "Genetics and Pulmonary Disease"

Ian Shine, M. D.
Associate Professor of Community Medicine
University of Kentucky Medical Center

10:15 a.m. Coffee Break

10:30 a.m. "Pros and Cons of Surgery for Emphysema"

Robert B. McElvein, M. D.
Clinical Professor, Department of Surgery
University of Kentucky Medical Center

11:10 a.m. "Cor Pulmonale"

Ralph Shabetai, M.D.
Associate Professor of Medicine
University of Kentucky Medical Center

12:00 noon Lunch Break

1:30 p.m. "Pulmonary Fibrosis"

Kenneth F. Tufts, M.D., Internal Medicine
Lexington

2:00 p.m. "Use and Abuse of Oxygen"

William H. Anderson, M.D., Chief
Pulmonary Disease Section
Department of Medicine
University of Louisville School of Medicine

2:30 p.m. "Pulmonary Complications of Cardiac Surgery"

Allan M. Lansing, M.D., Chief
Cardiovascular Surgery
University of Louisville School of Medicine

3:00 p.m. "Tuberculin Skin Testing"

Paul A. Pichardo, M.D., Medical Director
State TB Hospital
Glasgow

SPECIAL ARTICLES

The Challenges We Face

HENRY B. ASMAN, M.D.*

Louisville

TRADITIONALLY, the President of KMA gives an accounting of his stewardship in his Presidential Address at the Annual Meeting upon the completion of his term of office, recounting the successes and the disappointments of the preceding year, and based upon his experiences, makes recommendations for the guidance of his successors. This is as it should be.

This being a "political" year, however, with platforms and position papers seeming to be the order of the day, it would seem appropriate for your President, who was not required to submit a platform prior to his election, to state his views on the pressing problems confronting the Association and to express, in some measure, possible ways in which these problems may be successfully resolved.

These remarks will be divided into two categories: the first, "domestic relations", dealing with the internal workings of our Association especially as they relate to the knowledge and understanding by the members of the policies and actions of the elected officials; and, second, "foreign relations", referring to KMA's associations with the allied professions, para-medical groups, the government, and the public.

"DOMESTIC RELATIONS"

Communications

Someone has said that in any professional organization 10 percent of the membership does all of the voluntary work, 25 percent do nothing but criticize and complain, and the remaining 65 percent feel that they have made their full contribution to the organization when they pay their dues—which, incidentally, they strongly suspect are too high.

Having been closely involved in the "inner workings" of the Association for the past five or six years, and having watched the diligent and conscientious efforts of the many officers, trustees, and committeemen, I am pleased to say that these percentages do not apply to KMA. But, sadly, there is a small number who do contribute nothing but criticism and complaints, usually without any knowledge on which to base their comments, and there are far, far too many of our members who exert little effort to acquaint themselves with the policies of the Association, reasons behind these policies, and the diligence with which these policies are being implemented in the interest of medicine and the people of Kentucky.

I have had the feeling that the leadership of KMA was doing an excellent job in making this knowledge available to its members but it is obvious that we are not reaching a great many of them. Continued efforts to develop better communications between the governing body and the members are imperative and it is my intention to make this a principal item on the agenda for the Trustee District meetings this year.

Plans and Development

In order to remain a viable, active and efficient organization, KMA must be amenable to change, not only in its thinking but in its organizational structure, so that its resources may be expended constructively and efficiently in meeting its goals and achieving its purposes.

During the 1966-67 Associational year, the Commission to Study the Reorganization of KMA made an exhaustive study of the association and presented numerous recommendations designed to improve the workings of the organization. Many of these were approved and have been implemented; some were deferred for further study.

In its final report the Commission recommended that the Association conduct such a study on a continuing basis in order that our efforts may always be abreast of these rapidly changing times.

I have therefore requested the Board of Trustees to appoint a Committee on Plans and Development as one of the permanent committees of the Association, with the recommendation that its membership include members from the academic and institutional groups within the profession, and from the younger members, as well as from the older and more active members in the organizational work.

Such a committee might well devote its early efforts to a modernization of our Constitution and By-laws; to the problems inherent in the formation of multi-county societies; and to consideration of what

*President, Kentucky Medical Association, 1968-69 Associational year

seems to be an increasingly popular notion—the appointment by professional organizations of a Lay Advisory Board. These, among many other subjects, are worthy of in-depth study.

Membership

It might be suggested that each member consider himself a "one-man membership committee". There are approximately 300 licensed physicians in Kentucky who are not members of KMA. We NEED these individuals and they NEED organized medicine.

A recent survey indicated that more than 100 physicians in full-time academic medicine in Kentucky do not belong to their county and state associations. One might wonder if the policy of granting "reduced" dues to these individuals may not be producing reverse psychology—implying "second-class" membership—and acting as a deterrent rather than an inducement as intended.

In view of the excellent relationship over the years between KMA and the two medical schools, it is disheartening that such a large percentage of the faculty members fail to recognize the benefits that would accrue to them, as well as the added contribution they could make to the profession, through membership in the Association.

I would further urge that greater effort be expended in encouraging the students in our two medical schools to become "Student Members" of KMA. It is important that we introduce these men and women to Organized Medicine as early as possible in their careers and to manifest our continued interest in their welfare, as well as their views, throughout the period of their education. KMA has encouraged and co-operated with the SAMA chapters, and has made an outstanding contribution, I believe, with its Senior Day Programs, but is this enough? Would it not be to our advantage, as well as theirs, to draw them into our organization while they are still students? After all, in just a few years they will be the leaders of Medicine in Kentucky!

"FOREIGN RELATIONS"

Comprehensive Health Planning

The single most important long-range program with which KMA should, and will concern itself during the coming year is Comprehensive Health Planning.

Never has there been a greater opportunity for the membership of KMA to demonstrate the leadership which we rightly believe should be ours.

Authorized by Public Law 89-749, Governor Louie B. Nunn, last June 14, created a Health Planning Commission to develop policies, procedures, and regulations for comprehensive health planning, and designated this Commission as the single state agency for supervising the administration of the health planning functions of the Commonwealth and conferred upon it the authority to receive and spend funds for these functions.

Headed by the Governor, as chairman, this Commission includes the Commissioners of Health, Mental Health, and Finance, and the Administrator of the Kentucky Program Development Office.

In the same Executive Order, Governor Nunn also created a statewide Health Planning Council to advise and counsel the Commission on all facets of health planning: services, facilities, manpower, utilization of funds, priorities, etc., in an effort to marshall all health resources within the state to assure comprehensive health services of high quality for every purpose.

Representing the private practice of medicine on this Council are Doctors Hoyt Gardner, Bob Pennington, and Laman Gray. Also on the Council, from the field of Public Health, are Doctors Frederick A. Stine, Fort Thomas, and William Elsea, Lexington. From the University of Kentucky Medical Center is William R. Willard, M.D. Physicians who are ex-officio members of the Council, without vote, include Doctors Russell Teague, Dale Farabee and Margaret A. Limper.

The remainder of the Council is made up of representatives of the other health professions, the state government, and the consumers of health services which, by law, must constitute the majority of voting members.

The Governor has appointed an excellent and knowledgable group of individuals to this Council. The officers and staff of KMA have attempted to establish close liaison with the Council and its staff, and will continue to develop this desirable and important rapport.

In order to achieve statewide comprehensive health planning, the state has been divided into 15 geographic areas. Each area has been directed to select its own Area Planning Council, constituted according to specifications in the Law, to study the needs of its own area and to make recommendations, through the State Council, to the Health Planning Commission on all matters related to health in that area.

NOW is the time for the physicians to show their interest in their community, their area and their state by taking the lead in the organization of the Area Councils and by active participation in the planning for the health care of Kentucky. We have for many years complained of the myriad programs instituted by government agencies (and some voluntary agencies) without our knowledge, advice or approval. The mechanism of comprehensive health planning now gives us the opportunity to be a part of the initial planning of all programs at the grass-roots level, to influence the development of plans to improve health facilities and the delivery of health services, and to provide the expertise in these matters that only our profession posseses. Let's not fluff this opportunity!

Medicaid

Title XIX of P.L. 89-97 has been a thorn in the side of the medical profession in Kentucky since its inception. A program of this magnitude, drawn up in haste and passed without adequate study or public hearings in the interest of political expediency, was

bound to have serious defects making smooth implementation exceedingly difficult if not impossible.

That this is true is evidenced by the fact that the next session of Congress found it necessary to enact rather extensive amendments to the Law. The unhappiness and frustration experienced by physicians in Kentucky has been shared by physicians in most of the other states as well as other vendors of services covered under this law. There is no need to re-hash the difficulties you have encountered—the dual fee schedule, the inadequate prescription drug list, the promise of usual and customary fees—only to find that the money for such fees was lost in the bureaucratic maze of Frankfort and the budget finally passed by the Legislature contained only funds for usual and customary fees for out-of-hospital services. This lack of faith was then compounded by the announcement that usual and customary fees would be paid only for those services previously covered under the program rather than for all out-of-hospital services as we had been led to believe. We are familiar, too, with the tremendous backlog of unpaid claims dating back several months at a time. This has worked a severe hardship on some of our members whose practice includes large numbers of patients in this category.

Our Technical Advisory Committee deserves unstinting praise for their dedicated efforts in our behalf in the face of tremendous odds.

We must continue our efforts to get the administration of this program into the private sector and out from under the direction of government agencies. It is only in this way that the program can be run efficiently, economically, and in the best interests of the patients and the vendor groups.

I intend to exert every effort to see this transition become a reality, and recent signs lend some encouragement that this might be accomplished in the not too distant future.

Health Manpower

One of the most pressing problems facing medicine today is the acute shortage of physicians and other health personnel. The AMA and the Association of American Medical Colleges recently adopted a joint-policy position: "All medical schools should now accept as a goal the expansion of their collective enrollments to a level that permits all qualified applicants to be admitted." The members of KMA, as an organization and as individuals, should encourage our medical schools to implement this policy. We should give further evidence of our interest in solving the problems of this shortage, by the active financial support of our medical schools and by encouraging additional financial support for the schools from all available sources, both private and governmental.

The shortage of personnel in the para-medical fields is also a matter of great concern to all of us. The Kentucky Allied Medical Council has initiated a "Health Careers Program" to encourage and stimulate young people in Kentucky to choose a career in one of the many health-related fields. The Kentucky Hospital Association has taken the initial lead in the development of this program and, for that, we are indebted to them. KMA, the Kentucky Dental Association, the Kentucky Pharmaceutical Association, and the Kentucky Nurses' Association are cooperating in this project. The county societies, as well as the individual members, must lend their assistance in aiding in the distribution of the attractive material that is being developed, by providing knowledgable speakers to interested groups of students, and in other ways encouraging young individuals to enter these fields.

AMA

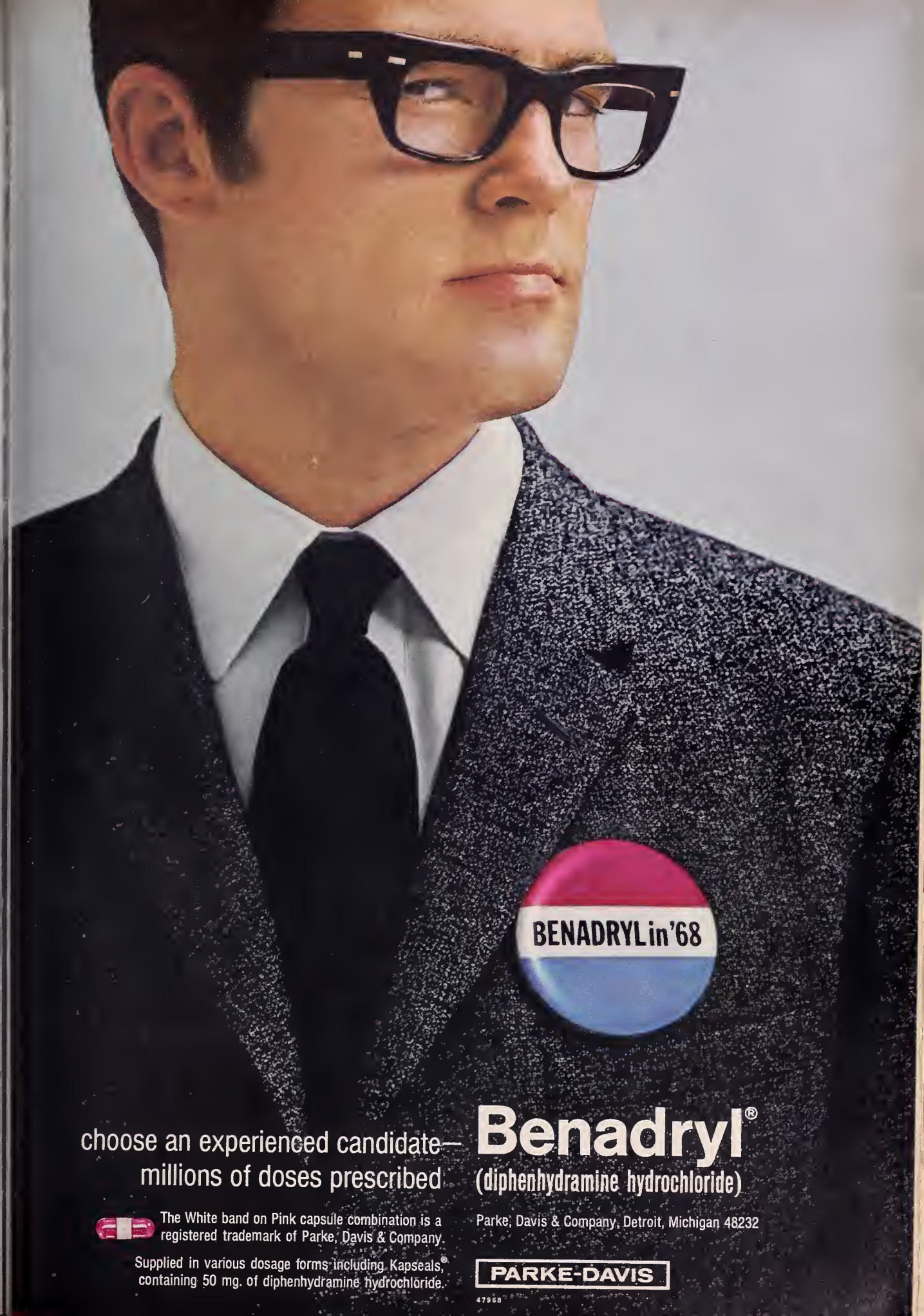
This item does not refer to the American Medical Association but to the Association of Medical Assistants, and more specifically to the Kentucky State Association of Medical Assistants.

This organization is made up of a group of our employees who are dedicated to the enhancement of their own knowledge and skills so that they may better serve us and our patients. KSAMA is a growing organization but it is not growing fast enough.

KMA has encouraged the growth and development of this association and it will be in the interest of each of us, as individuals, if we would urge our employees to seek membership in it. Many of our members feel that it is a very worthwhile, though token, "fringe benefit" to reimburse each employee for her $15 annual dues.

With 37 active committees, councils and commissions in the KMA organization, it is obvious that I have touched on but a few of the more important policies and problems with which we are concerned. An in-depth discussion of the functions and activities of each of these groups is impossible in the space allotted, but it is my fervent wish that every member of KMA could become familiar with the operations of his Association. It is to be expected that individual members will occasionally disagree with the elected officials who are charged with the responsibilities of the day-to-day operation of the Association. It is far better that such disagreement or criticism be based on sound knowledge rather than on misinformation, rumor or hearsay. The strength of our Association is founded on its democratic structure which guarantees that the voice of the individual physician member can always be heard—through his representative in the House of Delegates, through his Trustee, or through direct communication with the elected officers.

I will take this opportunity to again express my appreciation of the great honor bestowed upon me by my peers and for the privilege of devoting this year of service in the interest of the medical profession in Kentucky.



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and no other oral contraceptive is quite like Ovulen-21®

Each tablet contains ethynodiol diacetate 1 mg., mestranol 0.1 mg.

The progestin is distinctive, and for some women this may mean a different clinical response. The Compack® tablet dispenser is distinctive; its functional simplicity makes it virtually patient-proof. The acceptance of Ovulen-21 is distinctive... together with Ovulen®, it is more often prescribed than any other individual contraceptive product currently available.

Indication—Oral contraception.

Contraindications—Thrombophlebitis, thromboembolic disorders, cerebral apoplexy or a past history of these conditions, markedly impaired liver function, known or suspected carcinoma of the breast, known or suspected estrogen-dependent neoplasia, undiagnosed abnormal genital bleeding.

Warnings—Watch for the earliest manifestations of thrombotic disorders (thrombophlebitis, cerebrovascular disorders, pulmonary embolism, retinal thrombosis); if present or suspected discontinue the drug immediately.

British studies reported in April 1968[1,2] estimate there is a seven- to tenfold increase in mortality and morbidity due to thromboembolic diseases in women taking oral contraceptives. In these controlled retrospective studies, involving 36 reported deaths and 58 hospitalizations due to "idiopathic" thromboembolism, statistical evaluation indicated that the differences observed between users and non-users were highly significant. The conclusions reached in the studies are summarized in the table below:

Comparison of Mortality and Hospitalization Rates Due to Thromboembolic Disease in Users and Non-Users of Oral Contraceptives in Britain.

Category	Mortality Rates		Hospitalization Rates (Morbidity)
	Age 20-34	Age 35-44	Age 20-44
Users of Oral Contraceptives	1.5/100,000	3.9/100,000	47/100,000
Non-Users	0.2/100,000	0.5/100,000	5/100,000

No comparable studies are yet available in the United States. The British data, especially as they indicate the magnitude of the increased risk to the individual patient, cannot be applied directly to women in other countries in which the incidences of spontaneously occurring thromboembolic disease may differ.

Discontinue medication pending examination if there is sudden partial or complete loss of vision, or sudden onset of proptosis, diplopia or migraine. Withdraw medication if papilledema or retinal vascular lesions are found.

Since the safety of Ovulen in pregnancy has not been demonstrated, it is recommended that pregnancy be ruled out for any patient who has missed two consecutive periods before continuing the contraceptive regimen. If the patient has not adhered to the prescribed schedule the possibility of pregnancy should be considered at the first missed period.

A small fraction of the hormone agents in oral contraceptives has been identified in the milk of mothers receiving these drugs. The long-range effect to the nursing infant cannot be determined at this time.

Precautions—Pretreatment physical examination should include special reference to the breasts and pelvic organs, and a Papanicolaou smear.

Endocrine and possibly liver function tests may be affected by Ovulen. Therefore, it is recommended that such tests if abnormal be repeated after the drug has been withdrawn for two months.

Pre-existing uterine fibromyomas may increase in size under the influence of progestogen-estrogen preparations.

Because these agents may cause some degree of fluid retention, conditions which might be influenced by this factor, such as epilepsy, migraine, asthma, cardiac or renal dysfunction, require careful observation.

In breakthrough bleeding, and all irregular vaginal bleeding, consider nonfunctional causes. Adequate diagnostic measures are indicated in undiagnosed vaginal bleeding.

Carefully observe patients with a history of psychic depression and discontinue the drug if severe depression recurs.

Any possible influence of prolonged Ovulen therapy on pituitary, ovarian, adrenal, hepatic or uterine function awaits further study.

A decrease in glucose tolerance has occurred in a significant percentage of patients on oral contraceptives. The mechanism of this decrease is obscure. For this reason, diabetic patients should be observed carefully while receiving Ovulen.

Because of the effects of estrogens on epiphyseal closure Ovulen should be used judiciously in young patients in whom bone growth is not complete.

The age of the patient constitutes no absolute limiting factor, although Ovulen therapy may mask the onset of the climacteric.

The pathologist should be informed of Ovulen therapy when relevant specimens are submitted.

Adverse Reactions—A statistically significant association has been shown between use of oral contraceptives and the following serious adverse reactions: thrombophlebitis, pulmonary embolism.

Although available evidence is suggestive of an association, such a relationship has been neither confirmed nor refuted for the following serious adverse reactions: cerebrovascular accidents, neuro-ocular lesions, e.g., retinal thrombosis and optic neuritis.

The following adverse reactions are known to occur in patients receiving oral contraceptives: nausea, vomiting, gastrointestinal symptoms (such as abdominal cramps and bloating), breakthrough bleeding, spotting, change in menstrual flow, amenorrhea during and after treatment, edema, chloasma or melasma, breast changes (tenderness, enlargement, secretion), change in weight, changes in cervical erosion and cervical secretions, suppression of lactation when given immediately post partum, cholestatic jaundice, migraine, allergic rash, rise in blood pressure in susceptible individuals, mental depression.

Although the following adverse reactions have been reported in users of oral contraceptives, an association has been neither confirmed nor refuted: anovulation post treatment, premenstrual-like syndrome, changes in libido, changes in appetite, cystitis-like syndrome, headache, nervousness, dizziness, fatigue, backache, hirsutism, loss of scalp hair, erythema multiforme and nodosum, hemorrhagic eruption, itching.

The following laboratory results may be altered by oral contraceptives: hepatic function: increased sulfobromophthalein and other tests; coagulation tests: increase in prothrombin, Factors VII, VIII, IX and X; thyroid function: increase in PBI and butanol extractable protein bound iodine, and decrease in T^3 values; metyrapone test; pregnanediol determination.

References: 1. Inman, W. H. W., and Vessey, M. P.: Brit. Med. J. 2:193-199 (April 27) 1968. 2. Vessey, M. P., and Doll, R.: Brit. Med. J. 2:199-205 (April 27) 1968.

Before prescribing see Detailed Product Information.

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Indications: Dimetapp is indicated for symptomatic relief of the allergic manifestations of respiratory illnesses, such as the common cold and bronchial asthma, seasonal allergies, sinusitis, rhinitis, conjunctivitis, and otitis.
Contraindications: Hypersensitivity to antihistamines. Not recommended for use during pregnancy.
Precautions: Until patient's response has been determined, he should be cautioned against engaging in operations requiring alertness. Administer with care to patients with cardiac or peripheral vascular diseases or hypertension.
Side Effects: Hypersensitivity reactions including skin rashes, urticaria, hypotension and thrombocytopenia, have been reported on rare occasions. Drowsiness, lassitude, nausea, giddiness, dryness of the mouth, mydriasis, increased irritability or excitement may be encountered.
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(Dimetane® [brompheniramine maleate], 12 mg.; phenylephrine HCl, 15 mg.; phenylpropanolamine HCl, 15 mg.)

up to 10-12 hours clear breathing on one tablet



EDITORIALS

Revival of the Physical Examination

It is not always an easy matter in these busy times to keep one's priorities in proper order, but perhaps this is less difficult for the physician than for some others in our society. The priority for the physician is, to the best of his ability, to help the patient. The establishment of the correct diagnosis makes possible the beginning of the helping process. In spite of the many new laboratory techniques and modern medical instrumentation, it is the expertly performed history and physical examination that produces the correct diagnosis in the majority of patients. One of the challenges that the practice of medicine provides to a physician is that of improving his abilities with the history and physical examination. It is not only one of the challenges, but it may remain one of the satisfactions from a long and busy medical practice.

Recent scientific advances in medical instrumentation and in surgery have given new emphasis to certain aspects of the physical examination. There are examples of this as the physical examination relates to the cardiovascular system. With the development of arteriography of the head and neck there is a new interest in the diagnosis and surgical treatment of atherosclerotic disease of the carotid and vertebral-basilar arterial systems. In middle-aged and in older patients in particular, careful palpation of the arteries of the neck, head, supraclavicular fossae and the upper extremities is indicated. This is followed by careful auscultation over the carotid and subclavian arteries as well as over the head in a search for bruits. The bruits associated with atherosclerotic disease are almost always systolic and may vary from mild to harsh in their intensity. Bruits may be heard over partially occluded arteries but no bruit would be expected over a completely occluded artery.

A sound which is sometimes heard in the neck area and which may be confused with a carotid or subclavian bruit is the venous hum. This is particularly so in younger patients. The venous hum is usually loudest just superior to the sternal end of the clavicles; it is a continuous sound and may be abolished by compressing the jugular veins on the side which it is heard. The exact etiology of the venous hum isn't known, but it is often louder in diastole and with the patient sitting up and will disappear with the recumbent position.

In recent years it has become apparent that inspection and palpation of the precordial area of the chest is much more apt to provide valuable information about the heart than is percussion. Inspection and palpation may provide information about individual chamber enlargement of the heart where the electrocardiogram and chest X-ray have failed to do so. The size of the normal apex impulse is less than three centimeters in diameter and the normal apex impulse is not sustained. With left ventricular hypertrophy the apical impulse becomes larger in diameter and the thrust is more sustained. When the right ventricle becomes enlarged its thrust will lift the anterior portion of the chest including the sternum.

Palpation of the abdomen may reveal an unsuspected arteriosclerotic aneurysm of the abdominal aorta. Bruits may be heard over the abdomen which represent atherosclerotic narrowing of the aorta or one of its major branches. In the hypertensive patient auscultation in the lumbar area may reveal the bruit of renal artery stenosis. The hepatojugular reflex test may give information as to the func-

tion of the right ventricle. To carry out the test the trunk of the patient is elevated to about 45 degrees above the horizontal; in this position the venous pulsations in the jugular veins are seen at the level of the clavicle. After noting the level of the venous pulse the examiner places his hand over the right upper quadrant of the abdomen and applies firm pressure for about 30 seconds or more. In patients with rightsided heart failure the upper level of venous pulsation in the internal jugular vein may significantly increase; the amplitude of pulsation of the vein may also increase.

The arterial circulation of the extremities may be examined by some simple physical methods. The peripheral pulses are to be noted in the upper and lower arm and the upper and lower leg and the two sides compared. When the upper extremities are being examined the patient may be asked to hold his hands above his head and clench them rapidly a number of times and then open the hands for examination. If there is significant impairment of the arterial circulation the hands and fingers become blanched excessively. Distribution of the pallor may indicate whether the impairment of the circulation is generalized or confined to irregular areas. Postural color changes in the lower extremities may be demonstrated by having the patient lie on his back with the lower extremities flexed at the hips at an angle of about 90 degrees and then alternately flex and extend the foot at the ankle. After 30 seconds of this position the color of the skin is noted. With a normal arterial circulation there is only a mild pallor. The degree of the pallor gives an indication of the severity of the impairment of the circulation. After the feet are returned to a dependent position normal color returns to the skin of the lowcr extremities in about 10 seconds. With impairment of the arterial circulation the color returns slowly over a period of 30 to 60 seconds and a reactionary or dependent rubor is noted.

By correlating the data from cardiac catherization, arteriography and many other techniques with physical findings the physical examination has become increasingly more effective and what's more, remains a constant and interesting challenge to the physician.

WALTER S. COE, M.D.

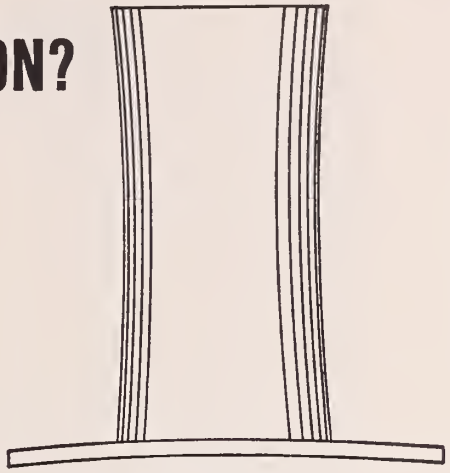
See November Issue

for complete coverage of

1968 Annual Meeting

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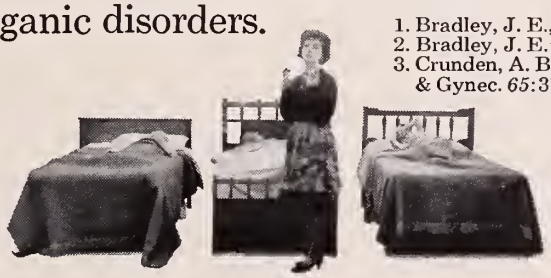
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...can be rough when epidemics of nausea and vomiting strike a family. Emetrol offers prompt, safe relief. It is free from toxicity[1] or side effects[2,3] and will not mask symptoms of serious organic disorders.

1. Bradley, J. E., *et al.*: J. Pediat. *38*:41 (Jan.) 1951.
2. Bradley, J. E.: Mod. Med. *20*:71 (Oct. 15) 1952.
3. Crunden, A. B., Jr., and Davis, W. A.: Am. J. Obst. & Gynec. *65*:311 (Feb.) 1953.



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chlorthalidone 50 mg.
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One Regroton tablet a day usually helps you and your patient bring high blood pressure down and keep it down.

Regroton produces a smooth, long-acting effect that usually reduces both systolic and diastolic pressures. At the same time it often acts to allay anxiety and nervous tension associated with hypertension.

Although Regroton is generally well tolerated, adverse reactions may occur. This drug is contraindicated in mental depression, demonstrated hypersensitivity, and most cases of severe renal or hepatic diseases. For a complete list of side effects, please see the Prescribing Information summarized on the following page.

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chlorthalidone 50 mg.
reserpine 0.25 mg.



One Regroton tablet a day usually helps you and your patient bring high blood pressure down and keep it down.

Indications: Hypertension. **Contraindications:** History of mental depression, hypersensitivity, and most cases of severe renal or hepatic diseases. **Warning:** With the administration of enteric-coated potassium supplements, which should be used only when adequate dietary supplementation is not practical, the possibility of small-bowel lesions (obstruction, hemorrhage, and perforation) should be kept in mind. Surgery for these lesions has frequently been required and deaths have occurred. Discontinue coated potassium-containing formulations immediately if abdominal pain, distention, nausea, vomiting, or gastrointestinal bleeding occur. Discontinue one week before electroshock therapy, and if depression or peptic ulcer occurs. *Use in pregnancy:* Because chlorthalidone may cross the placental barrier and appear in cord blood and thiazides may appear in breast milk, this drug should be used with care in pregnant patients and nursing mothers. When used in women of childbearing age, the potential benefits of the drug should be weighed against the possible hazards to the fetus. Use of chlorthalidone may result in fetal or neonatal jaundice, thrombocytopenia, and possibly other adverse reactions which have occurred in the adult. Increased respiratory secretions, nasal congestion, cyanosis and anorexia may occur in infants born to reserpine-treated mothers. **Precautions:** Antihypertensive therapy with this drug should always be initiated cautiously in postsympathectomy patients and in patients receiving ganglionic blocking agents, other potent antihypertensive drugs, or curare. Reduce dosage of concomitant antihypertensive agents by at least one-half. To avoid hypotension during surgery, discontinue therapy with this agent two weeks prior to elective surgical procedures. In emergency surgery, use, if needed, anticholinergic or adrenergic drugs or other supportive measures as indicated. Because of the possibility of progression of renal damage, periodic kidney function tests are indicated. Discontinue if the BUN rises or liver dysfunction is aggravated. Hepatic coma may be precipitated. Electrolyte imbalance, sodium and/or potassium depletion may occur. If potassium depletion should occur during therapy, the drug should be discontinued and potassium supplements given, provided the patient does not have marked oliguria. Take particular care in cirrhosis or severe ischemic heart disease and in patients receiving corticosteroids, ACTH, or digitalis. Severe salt restriction is not recommended. Use cautiously in patients with ulcerative colitis or gallstones (biliary colic may be precipitated). Bronchial asthma may occur in susceptible patients. **Adverse Reactions:** The drug is generally well tolerated. The most frequent side effects are nausea, gastric irritation, vomiting, diarrhea, constipation, muscle cramps, headache, dizziness and acute gout. Other potential side effects include angina pectoris, anxiety, depression, bradycardia and ectopic cardiac rhythms (especially when used with digitalis), drowsiness, dull sensorium, hyperglycemia and glycosuria, hyperuricemia, lassitude, restlessness, transient myopia, impotence or dysuria, orthostatic hypotension which may be potentiated when chlorthalidone is combined with alcohol, barbiturates or narcotics, leukopenia, aplastic anemia, skin rashes, thrombocytopenia, agranulocytosis, nasal stuffiness, increased gastric secretions, nightmare, purpura, urticaria, ecchymosis, weakness, uveitis, optic atrophy and glaucoma, and pruritus. Eruptions and/or flushing of the skin, a reversible paralysis agitans-like syndrome, blurred vision, conjunctival injection, increased susceptibility to colds, dyspnea, weight gain, decreased libido, dryness of the mouth, deafness, anorexia, and pancreatitis when epigastric pain or unexplained G.I. symptoms develop after prolonged administration. Jaundice, xanthopsia, paresthesia, photosensitization and necrotizing angiitis are possible. **Average Dosage:** One tablet daily with breakfast. **Availability:** Pink, single-scored tablets in bottles of 100 and 1000.
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For details, please see complete prescribing information.

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RE-6225

ORGANIZATION SECTION

Ky. Thoracic Society Plans Fall Conference Nov. 8-9

The Kentucky Thoracic Society will hold a fall conference on respiratory diseases November 8-9 at Gabe's Motor Inn, Owensboro, according to E. R. Gernert, M.D., Louisville, Society president, who urges all Kentucky physicians to attend.



Doctor Mitchell

Roger S. Mitchell, M.D., Denver, Col., director of the Webb-Waring Institute for Medical Research, will discuss "The Enigma of Airway Obstruction" at the Friday evening dinner meeting, according to Paul A. Pichardo, M.D., Glasgow, program chairman.

Other program participants will include Allan M. Lansing, M.D., and William H. Anderson, M.D., University of Louisville School of Medicine; Robert Penman, M.D., Robert McElvein, M.D., Kenneth Tufts, M.D., Ian Shine, M.D. and Ralph Shabetai, M.D., University of Kentucky College of Medicine.

Second Newborn Symposium Planned November 12-13

The department of pediatrics of the University of Louisville School of Medicine will present its second annual Newborn Symposium November 12-13 at Stouffer's Inn, Louisville, according to Billy F. Andrews, M.D., director of newborn services.

Participants in the two-day session include Robert Beargie, M.D., University of Kentucky; George Cassady, M.D., University of Alabama; Cecil M. Drillien, M.D., University of Edinburgh; Frank Falkner, M.D., National Institute of Child Health; John Greene, Jr., M.D., University of Kentucky; Walter Hughes, M.D., University of Louisville; Lula Lubcheno, M.D., University of Colorado; and Duncan MacMillan, M.D., University of Louisville.

Others scheduled to participate are Douglas Shanklin, M.D., University of Chicago; John Sinclair, M.D., Columbia University; Robert Usher, M.D., Royal Victoria Hospital; and Myron Winick, M.D., Cornell University. Further information may be obtained from Doctor Andrews who is in charge of the arrangements.

Report C on Public Comment Adopted by AMA House

The American Medical Association's House of Delegates adopted Report C of the Board of Trustees on "AMA Posture on Public Comment" during its meeting June 16-20 in San Francisco. At that time the House recommended that this report be published in all state association journals.

For the information of all KMA members, the editors of **The Journal** agreed that Report C should be published in its entirety. The complete report follows:

"The Board is cognizant of the great increase in attention being given in the press and broadcast media to medicine and health care. Our profession is now the focus of one of America's greatest interests. It will constantly be in the spotlight, ending the professional reticence and privacy in which medicine functioned most of the time in the past.

Even though this interest is a tribute to the importance of medicine and the public's desire for its benefits, it brings with it the problems facing any person or organization with a key public position: much of the coverage is critical or displays a lack of understanding.

The Board of Trustees has consulted with AMA staff and public relations counsel on this increasingly important situation. The conclusions that have resulted from this intensive and thoughtful consideration are submitted now:

1. When statements about medicine are misguided or unfair, corrective statements will be issued promptly when the facts are available and an orderly response is possible.

2. We must recognize that the prominence and complexity of medicine in the United States today result in many limitations. Medicine is a constant subject of news and comment, much of which cannot be subject to a later response. Often our replies cannot be carried by the broadcast medium or publication, or at best will be much less prominent than the original coverage. Quite often a responsible statement cannot be issued until the facts have been obtained, and these may be scattered about the country or involve a local situation or require a great deal of time.

3. The frequency and complexity of these matters have increasingly diverted the officers and staff of AMA to reacting to what others do and say. This decreases the ability to work on constructive, ongoing activities that are vital to our future.

4. Staff is developing in written form the best possible anticipatory statements regarding all foreseeable circumstances. By having such matters thought

out and documented when a need arises, we will be able to reduce the instances of surprise, decrease the time required for response, and assure consistency in AMA statements on these matters.

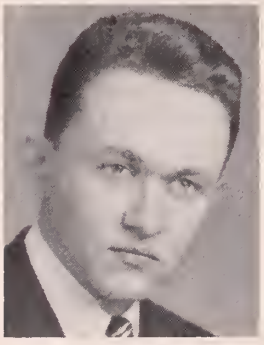
5. We will concentrate on building a positive posture by getting understanding for medicine's function and its positions on various considerations; and by educating the press, broadcasters and opinion leaders. This will help forestall much misguided criticism and build a favorable climate that will inoculate against susceptibility to unfair criticism.

6. All state and county medical societies are urged to follow these same procedures.

You will see many instances in which AMA responds to public comment, many in which we have acted but our effectiveness will be in correcting the source and may not be visible immediately, and instances when judgment indicates a response should not be made. In each case the best judgment and skills will have been applied to the complexities of the situation.

William Applegate Named KMA Executive Assistant

William T. Applegate, Louisville, who joined the KMA staff as an administrative assistant in May, was named to the position of executive assistant September 1. In this capacity, Mr. Applegate will work closely with KMA Executive Secretary Robert G. Cox in performing the administrative duties of the Association, including work with various KMA committees.



Mr. Applegate

Mr. Applegate, a Louisville native, received his B.A. degree from the University of Louisville in 1966. He worked as a part-time musician to help finance his education.

A member of the Kentucky Army National Guard, he is active in the Louisville Jaycees and the University of Louisville Associates.

Planning Mtg. for Health Conf. Includes Four Ky. Participants

Four prominent Kentucky health leaders participated in the planning meeting September 10 for a Regional Conference on Health Care Costs of the Secretary of Health, Education and Welfare scheduled December 10 and 11 in Harrisburg, Pa.

Kentuckians attending the meeting were George F. Brockman, M.D., Greenville, KMA past president; Howard L. Bost, M.D., Lexington, assistant vice president of the University of Kentucky Medical Center; J. Ed McConnell, Louisville, president of Kentucky Physicians Mutual, Inc.; and T. P. Hipkens, Lexington, president of Appalachian Regional Hospitals.

Participation in the Conference will be by invitation only and limited to approximately 200 persons residing in the Charlottesville Social Security Administration region which includes Kentucky, West Virginia, Virginia, Maryland, the District of Columbia, Pennsylvania, Puerto Rico and the Virgin Islands.

Canadian Physician To Deliver Annual L. E. Smith Lecture

David V. Bates, M.D., professor and chairman of the department of physiology at McGill University, Montreal, Canada, will deliver the annual L. E. Smith Memorial Lecture at 5 p.m., October 24, in the main hospital auditorium of the University of Kentucky Medical Center.

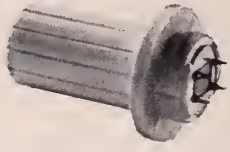
An internationally known authority on respiratory disease and respiratory physiology, Doctor Bates will discuss "Factors Affecting the Function of the Terminal Airway Unit of the Lung." He is co-author of the book, "Respiratory Function in Disease" and a fellow of the Royal College of Physicians.

Sponsored by the Kentucky Tuberculosis and Respiratory Disease Association and the Kentucky Thoracic Society, the Smith lectures are held each year in memory of the late Doctor Smith who pioneered TB work in Kentucky. All Kentucky physicians are invited to attend the lecture, according to Richard P. O'Neill, M.D., Lexington, lecture chairman.

Tuberculosis? Influenza?
Pneumonia? Leukemia?
Hodgkin's Disease? Syphilis?
Systemic Fungal Diseases?
Chronic Chest Diseases?
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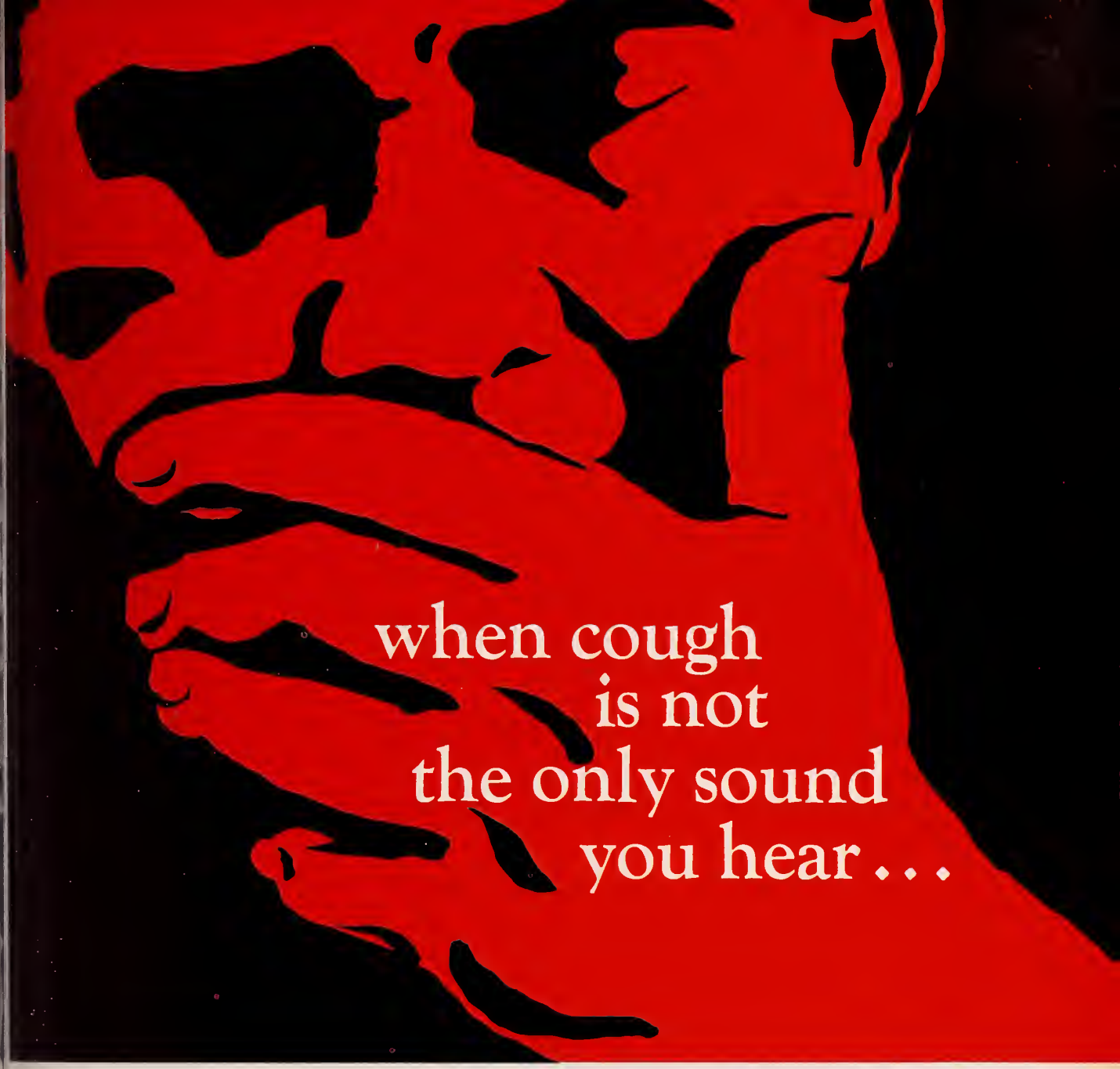
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Precautions—Nonspecific reactions are rare, but may occur. Vesiculation, ulceration or necrosis may occur at test site in highly sensitive persons. The test should be used with caution in patients known to be allergic to acacia, or to thimerosal (or other mercurial compounds).

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The therapeutic usefulness of Omni-Tuss is enhanced by a unique resin complex formulation providing the clinically desirable advantages of: (1) uniform drug availability throughout an extended period, (2) 8 to 12 hours of symptomatic control, (3) minimal dosage requirement, (4) minimal side effects.

Economical, efficient **b.i.d.** dosage—extremely well-tolerated by children, 6-12, and adults.

'Omni Tuss' Suspension: Each teaspoonful (5 cc.) contains 10 mg. codeine (Warning: May be habit-forming), 5 mg. phenyltoloxamine, 3 mg. chlorpheniramine, 25 mg. ephedrine, all as cation exchange resin complexes of sulfonated polystyrene, and 20 mg. guaiacol carbonate.

Available on prescription only. Class X exempt narcotic. Permissible on oral prescription.

Dosage: *Adults:* 1 teaspoonful (5 cc.) q12h.
Children (6-12 *years*): ½ teaspoonful q12h.

Side Effects: Minimal, but when encountered may include jitteriness, nausea, drying of mouth, insomnia, constipation, which disappear upon adjustment of the dose or discontinuance of treatment.

Precautions and Contraindications: For complete detailed information, refer to package insert or official brochure.

Strasenburgh

Strasenburgh Laboratories Division
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In the complex picture of moderate to severe anxiety...



there is a new reason for prescribing Mellaril (Thioridazine HCl)

effectiveness in mixed anxiety-depression

Long recognized for its usefulness in the treatment of moderate to severe anxiety, Mellaril is now also known to be effective against mixed anxiety-depression.

Often the symptoms of anxiety states are difficult to sort out—even with the most careful probing. The patient may manifest symptoms of agitation, restlessness, insomnia, somatic complaints. But what of the depression that may be mixed in the total picture? It is reassuring to know that Mellaril may be prescribed—with strong possibilities of success—when there is anxiety alone or a mixture of anxiety and depression.

Before prescribing or administering, see Sandoz literature for full product information, including adverse reactions reported with phenothiazines. The following is a brief precautionary statement.

Contraindications: Severe central nervous system depression, comatose states from any cause, hypertensive or hypotensive heart disease of extreme degree.

Warnings: Administer cautiously to patients who have previously exhibited a hypersensitivity reacti (e.g., blood dyscrasias, jaundice) to phenothiazines Phenothiazines are capable of potentiating central nervous system depressants (e.g., anesthetics, opiates, alcohol, etc.) as well as atropine and phosphorus insecticides. During pregnancy, administer only when necessary.

Precautions: There have been infrequent reports o leukopenia and/or agranulocytosis and convulsive seizures. In epileptic patients, anticonvulsant medication should also be maintained. Pigmentary retinopathy may be avoided by remaining within t recommended limits of dosage. Administer cautiously to patients participating in activities requiring complete mental alertness (e.g., driving) Orthostatic hypotension is more common in femal than in males. Do not use epinephrine in treating drug-induced hypotension. Daily doses in excess o 300 mg. should be used only in severe neuropsychiatric conditions.

Adverse Reactions: *Central Nervous System*—Drowsiness, especially with large doses, early in treatment; infrequently, pseudoparkinsonism and other extrapyramidal symptoms; nocturnal confusion, hyperactivity, lethargy, psychotic reactions, restlessness, and headache. *Autonomic Nervous System*—Dryness of mouth, blurred visio constipation, nausea, vomiting, diarrhea, nasal stuffiness, and pallor. *Endocrine System*—Galactorrhea, breast engorgement, amenorrhea, inhibition of ejaculation, and peripheral edema. *Skin*—Dermatitis and skin eruptions of the urticar type, photosensitivity. *Cardiovascular System*—Changes in the terminal portion of the electrocardiogram have been observed in some patients receiving the phenothiazine tranquilizers, including Mellaril (thioridazine hydrochloride). While there is no evidence at present that these changes are in any way precursors of any significa disturbance of cardiac rhythm, several sudden and unexpected deaths apparently due to cardiac arrest have occurred in patients previously showing electrocardiographic changes. The use of periodic electrocardiograms has been proposed but would appear to be of questionable value as a predictive device. *Other*—A single case described as parotid swelling.

Mellaril®
(Thioridazine HCl) 25 mg. t.i.d.

for moderate to severe anxiet and mixed anxiety-depressio

SANDOZ SANDOZ PHARMACEUTICALS, HANOVER, N. J. 6



Eli Lilly and Company
Indianapolis, Indiana 46206



"The inconvenience of a cold"

For a cold, NTz® Nasal Spray provides rapid relief of nasal symptoms. Relief starts with the first spray which opens the inferior part of the common meatus. A second spray, a few minutes later, will shrink the turbinates to help provide sinus drainage and ventilation. Dosage may be repeated every three or four hours as needed, for temporary relief of symptoms. NTz is well tolerated but overdosage should be avoided.

As a sinusitis deterrent, NTz Nasal Spray can be used to keep the nasal passages open during a cold to help prevent development of acute sinusitis—or to help prevent the acute condition from becoming chronic.

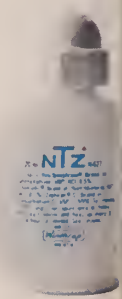
Supplied: NTz Nasal Spray, plastic squeeze bottles of 20 ml.; NTz Nasal Solution, bottles of 30 ml. (1 fl. oz.) with dropper.

NTz is more than a simple vasoconstrictor. It contains

Neo-Synephrine® (brand of phenylephrine) HCl 0.5 per cent, the major component, virtually synonymous with fast, efficient but gentle nasal vasoconstriction.

Thenfadil® (brand of thenyldiamine) HCl 0.1 per cent, topical antihistamine for reduction of rhinorrhea, sneezing or itching. It combats the allergic reactions that may occur in colds or sinusitis.

Zephiran® (brand of benzalkonium, as chloride, refined) 1:5000, antiseptic preservative and wetting agent to promote penetration and spread of the formula.

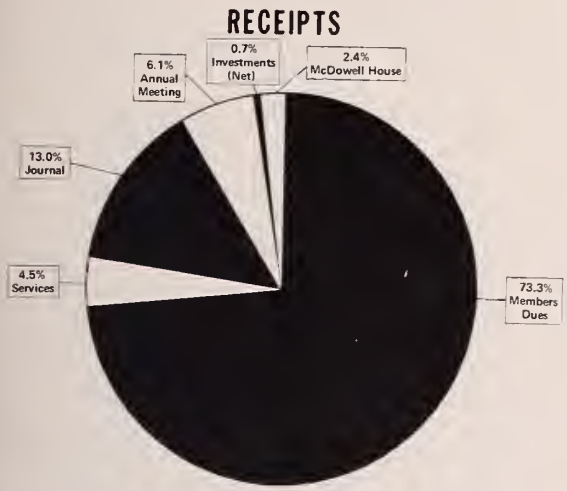


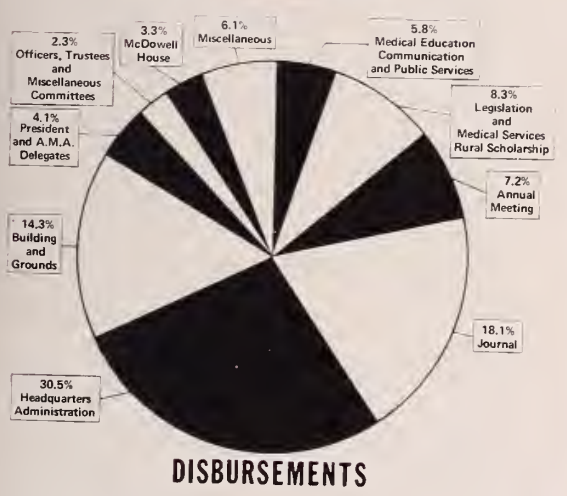
Winthrop Laboratories, New York, N.Y. 10016 Winthr

Association Funds Distribution Depicted by Graphs

The sources of KMA income and the distribution of these funds for the 1967-68 fiscal year are shown in the pie-shaped graphs below. The information is based upon the figures prepared by the Association's auditors.

Members having questions concerning the figures depicted by the graphs are encouraged to contact the Headquarters Office for additional information.





KMA Adds 23 Physicians To Its Membership

Twenty-three physicians recently joined the Kentucky Medical Association, according to the records of the membership department as of September 20. This addition of members boosted the total membership figure to more than 2,300 physicians, the highest number to belong to the Association in its history.

New members in Louisville are John N. Hafner, M.D., Claude C. Hazlett, M.D., Donald B. Katz, M.D., Theodore Lawwill, M.D., Daniel Leb, M.D., Richard O'Conner, M.D., Lafayette G. Owen, M.D. and Robert M. Senese, M.D.

New members in Lexington include Murray F. Ables, M.D., H. Martin Blacker, M.D., Walter R. Brewer, M.D., Preston V. Dilts, Jr., M.D., John Wells Garden, M.D., Martin Gebrow, M.D., Robert P. Goodman, M.D., Frank G. Marsh, M.D., James M. McEntyre, M.D., Russell L. Travis, M.D. and H. M. Vandiviere, M.D.

Other new members are W. G. Begley, M.D. and Terry Davis, M.D., Bowling Green, Peter A. Emmett, M.D., Wilmore, and Roberto Garcia-Rivera, M.D., Augusta.

TWO INTERNISTS—Board Eligible or Certified, wanted by multi-specialty group in Central Texas Associated with 100-bed hospital; $20-$24,000 annual salary; early partnership; no investment. Write G. H. Wahle, Jr., M. D. King's Daughters Clinic, Temple, Texas, or call collect 817 778-5501.





Each Cough Calmer™ contains the same active ingredients as a half-teaspoonful of Robitussin-DM®: Glyceryl guaiacolate, 50 mg.; Dextromethorphan hydrobromide, 7.5 mg.
A. H. Robins Company, Richmond, Virginia 23220
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In Memoriam

J. COBURN HILL, M.D.
Louisville
1905-1968

J. Coburn Hill, M.D., 62, a Louisville physician since 1930, died August 23. Death was attributed to a heart attack. Doctor Hill graduated from the University of Louisville School of Medicine in 1930. He was a past president of the Jefferson County Academy of General Practice and a member of the Kentucky Society of Anesthesiology.

WILLARD M. LAKE, M.D.
Hartford
1885-1968

Willard M. Lake, M.D., 85, a retired physician who practiced in Ohio County for 57 years, died August 7 in Richmond. A 1910 graduate of the University of Louisville School of Medicine, Doctor Lake was associated with the Veteran's Administration Hospital in Louisville for a number of years. He retired from the U.S. Armed Forces in 1958 in which he had served more than 40 years of combined active and reserve duty.

Renovascular Hypertension

(Continued from page 890)

from it. We believe patients over age 50 should not undergo surgery unless blood pressure cannot be controlled medically or unless it is thought revascularization might improve renal function. Poor response to surgery can be expected frequently in the older age group and in those patients who have had long-standing hypertension.

Summary

Seven cases of renovascular hypertension treated surgically are presented, showing several methods of vascular reconstruction. A critical review of patients who were not normotensive postoperatively is made, and difficulty in patient selection is discussed.

Bibliography

1. Dustan, Harriet P., et al.: An Evaluation of Treatment of Hypertension Associated with Occlusive Renal Artery Disease. *Circulation* 27:1018, 1963.

2. Stewart, Bruce H., et al.: Differential Function Studies in Renal Hypertension: Indications and Techniques. *The Journal of Urology*, 94:7, 1965.

TAO®(triacetyloleandomycin)
Brief Summary

INDICATIONS: Include streptococci, staphylococci, pneumococci and gonococci. Recommended for acute, severe infections where adequate sensitivity testing has demonstrated susceptibility to this antibiotic and resistance to less toxic agents.

CONTRAINDICATIONS: Contraindicated in pre-existing liver disease or dysfunction, and in individuals hypersensitive to the drug.

PRECAUTIONS: CAUTION: USE OF THIS DRUG MAY PRODUCE ALTERATIONS IN LIVER FUNCTION TESTS AND JAUNDICE. CLINICAL EXPERIENCE AVAILABLE THUS FAR INDICATES THAT THESE LIVER CHANGES WERE REVERSIBLE FOLLOWING DISCONTINUATION OF THE DRUG.

Not recommended for prophylaxis or in the treatment of infectious processes, which may require more than ten days continuous therapy. In view of the possible hepatotoxicity of this drug when therapy beyond ten days proves necessary, other less toxic agents should be used. If clinical judgment dictates continuation of therapy for longer periods, serial monitoring of liver profile is recommended, and the drug should be discontinued at the first evidence of any form of liver abnormality. When treating gonorrhea in which lesions of primary or secondary syphilis are suspected, proper diagnostic procedures, including dark-field examinations, should be followed. In other cases in which concomitant syphilis is suspected, monthly serological tests should be made for at least four months. When used in streptococcal infections, therapy should be continued for ten days to prevent the development of rheumatic fever or glomerulonephritis. The use of antibiotics may occasionally permit overgrowth of nonsusceptible organisms. A resistant infection or superinfection requires re-evaluation of the patient's therapy. In the event such occurs with this drug the medication should be discontinued, and specific antibacterial and supportive therapy instituted.

ADVERSE REACTIONS: Although reactions of an allergic nature are infrequent and seldom severe, those of the anaphylactoid type have occurred on rare occasions.

ROERIG
J. B. ROERIG DIVISION
CHAS. PFIZER & CO., INC.
235 EAST 42nd STREET
NEW YORK, N.Y. 10017

This advertisement for TAO® (triacetyloleandomycin), published at the request of the Food and Drug Administration, replaces a recent one which the FDA regards as misleading.

The advertisement headlined "new evidence for TAO . . ." and emphasized that the drug is "for the frequently seen respiratory infection in the office and for a problem pathogen* in the hospital. *Staphylococcus aureus."

We emphasize that triacetyloleandomycin is to be used only for acute, severe bacterial infections where adequate sensitivity testing has demonstrated susceptibility to this drug and resistance to other less toxic agents. In view of the possible, but reversible, jaundice and hepatotoxicity of this drug, other less toxic agents should be used unless the organism is resistant to those agents, or in those cases where hypersensitivity precludes their use.

TAO is contraindicated in preexisting liver disease or dysfunction, and in individuals who have shown hypersensitivity to the drug.

The advertisement emphasized that no tooth staining has been reported after ten years of use of this antibiotic. The Food and Drug Administration regards this claim as an implied comparison suggesting that triacetyloleandomycin and tetracycline have a similar antibacterial spectrum of effectiveness, and that TAO has less toxic potential. Any such implication is not intended and, of course, would be invalid.

The advertisement referred to a research study in which patients were given triacetyloleandomycin prior to determining the susceptibility of the offending organism. Any suggestion that triacetyloleandomycin be used clinically without first determining susceptibility of the offending organism should be disregarded.



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NEW YORK, N.Y. 10017



Contre-Coup Renal Artery Thrombosis

(Continued from page 896)

logic examination of the artery was mentioned. Such an injury will result in renal ischemia, and later, necrosis, but it may produce no early clinical symptoms nor signs of renal damage.

Though this case is noteworthy because of its singularity, its real importance is that it illustrates the often forgotten fact that severe renal trauma may be present without initial clinical evidence of its existence. It is therefore suggested that all individuals suffering significant trauma to the trunk—especially those with bone fractures—should have an IVP as part of their workup, with further urologic investigation as indicated.

Summary

A case of renal artery thrombosis contralateral to the side which received blunt trauma is presented. The fact that severe traumatic renal injuries may be "occult" and consequently overlooked is emphasized.

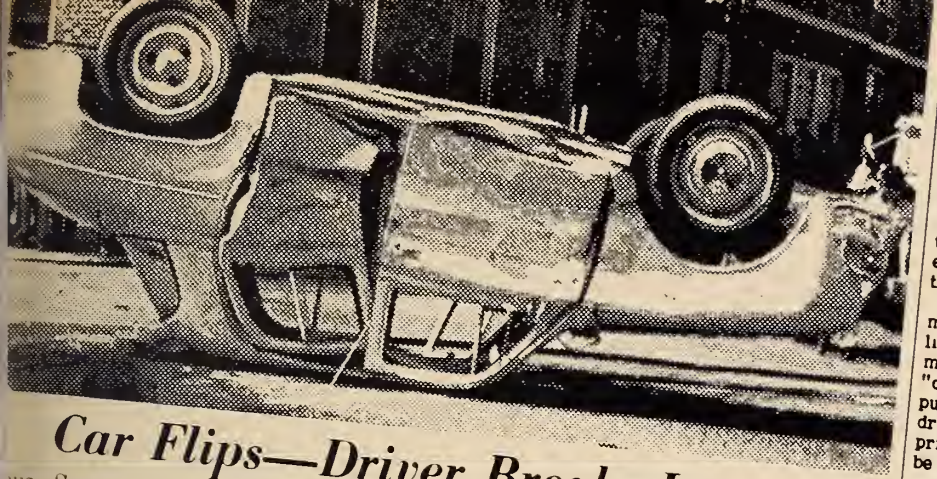
Suggested pathogenesis of such lesions is subintimal thrombosis following intimal fracture due to sudden stretching or torsion of the renal artery.

IVP is suggested as a part of the workup of any case of significant trauma to the trunk.

References

1. Steiness, Ib, J. H. Thaysen, Bilateral traumatic renal artery thrombosis. *Lancet* 1:527-29, 6 Mar. 1965.
2. Eliahou, H. E., H. Boichis and E. Eden, Traumatic infarction in a solitary kidney. *J. Urol.* 90:16-21, July 1963.
3. Baichwal, K. S. and D. Waugh, Traumatic Renal Artery Thrombosis. *J. Urol.* 99:14-17, 1968.
4. Collins, H. and J. K. Jacobs, Acute arterial injuries due to blunt trauma. *J. Bone & Joint Surg.* 43:193, 1961.

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STAFF PHOTO

Car Flips—Driver Breaks Leg

...us, Sept. 7. John P. Jones of ... incurred a broken leg today ... driving ... Patrolman B. R. Brown, the car hit a fire hydrant and flipped over on its ... Hasn't he ... car

issue, a... tember t... fications' ... ton dicta... Althou... made Mo... down by a ... ter shar... flat obje... was pass... Board ... McCredi... tion" s... elimi... the st... The c... ment ca... limit ra... mile li... "cut-of... public ... dren ... priv... be b... or th... schoo... The ... so so... rathe... hurs...

He's had enough excitement for one day.

For the patient who has been through an accident, the worry and anxiety following the experience may actually heighten the perception of pain. This is why there's a classic ¼ grain *sedative* dose of phenobarbital in Phenaphen with Codeine—*to take the nervous "edge" off,* so the rest of the formula can control the pain more effectively.

Phenaphen® with Codeine

Phenaphen® with Codeine No. 2, No. 3, or No. 4 contains: *Phenobarbital* (¼ gr.), 16.2 mg. (Warning: may be habit forming); Aspirin (2½ gr.), 162.0 mg.; Phenacetin (3 gr.), 194.0 mg.; Hyoscyamine sulfate, 0.031 mg.; Codeine Phosphate, ¼ gr. (No. 2), ½ gr. (No. 3), or 1 gr. (No. 4). (Warning: may be habit forming).

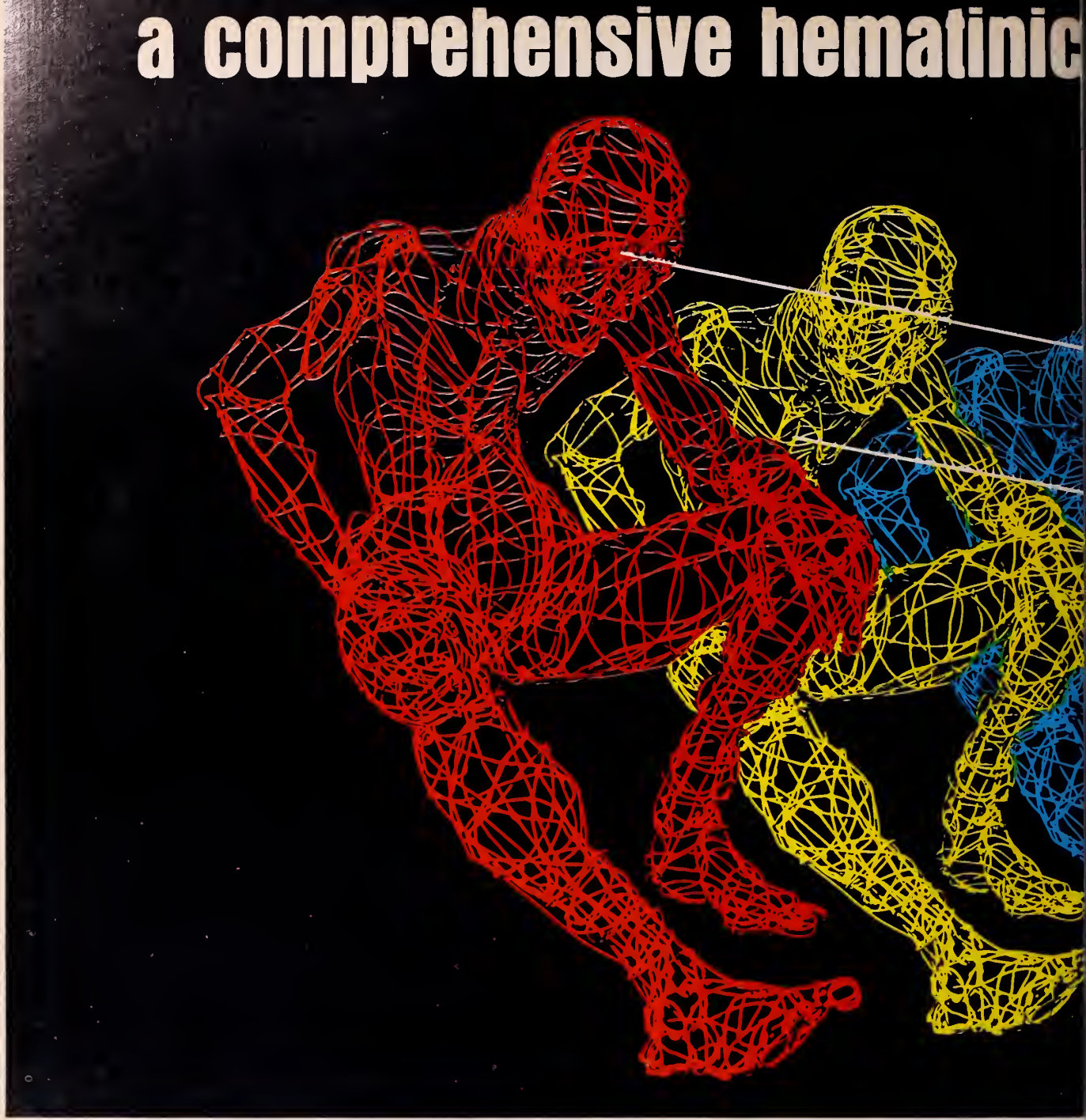
THE COMPOUND ANALGESIC THAT CALMS INSTEAD OF CAFFEINATES

Indications: Phenaphen with Codeine provides relief in severer grades of pain, on low codeine dosage, with minimal possibility of side effects. Its use frequently makes unnecessary the use of addicting narcotics. **Contraindications:** Hypersensitivity to any of the components. **Precautions:** As with all phenacetin-containing products excessive or prolonged use should be avoided. **Side effects:** Side effects are uncommon, although nausea, constipation and drowsiness may occur. **Dosage:** 1 or 2 capsules at 2 to 4 hour intervals, or as directed by physician. For further details see product literature.

A.H. ROBINS COMPANY
RICHMOND, VA. 23220 A·H·ROBINS



a comprehensive hematinic



Description: Each Pulvule® contains—

Special Liver-Stomach Concentrate, Lilly (containing Intrinsic Factor)	150	mg.
Cobalamin Concentrate, N.F., equivalent to Cobalamin (The total vitamin B_{12} activity in the Special Liver-Stomach Concentrate, Lilly, and the Cobalamin Concentrate, N.F., is 15 micrograms.)	7.5	mcg.
Iron, Elemental (as Ferrous Fumarate)	110	mg.
Ascorbic Acid (Vitamin C)	75	mg.
Folic Acid	1	mg.

Indications: Trinsicon® (hematinic concentrate with intrinsic factor, Lilly) is a multifactor preparation effective in the treatment of anemias that respond to oral hematinics, including pernicious anemia and other megaloblastic anemias and also iron-deficiency anemia.

Contraindications: Hemochromatosis and hemosiderosis.

Precautions: Anemia is a manifestation that requires appropr investigation to determine its cause or causes.

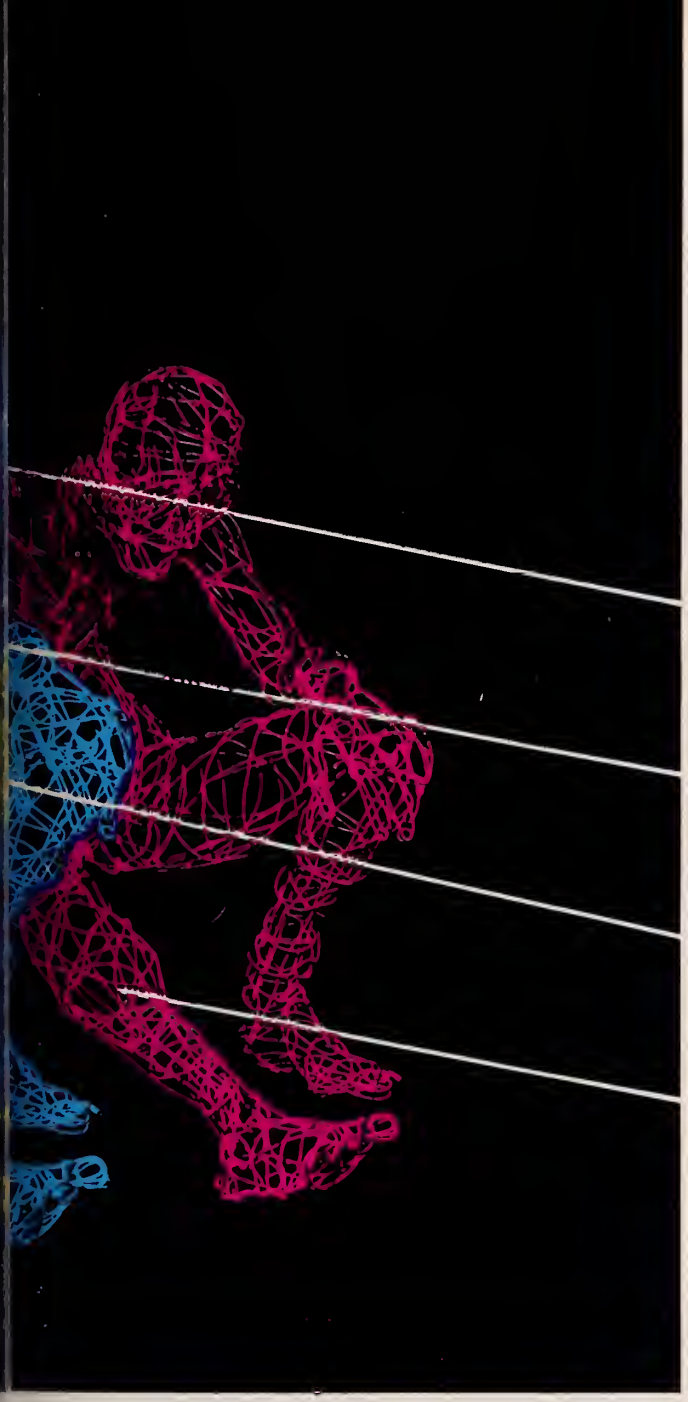
In pernicious anemia, the use of folic acid without adeq vitamin B_{12} therapy may result in hematologic remission but u rological progression. Adequate doses of vitamin B_{12} (paren or oral with potent intrinsic factor as in Trinsicon® [hema concentrate with intrinsic factor, Lilly]) usually prevent, ha improve the neurological changes.

As with all preparations containing intrinsic factor, resist may develop in some cases of pernicious anemia to the pote tion of absorption of physiological doses of vitamin B_{12}. If r ance occurs, parenteral therapy, or oral therapy with so-c massive doses of vitamin B_{12}, may be necessary. No single men fits all cases, and the status of the patient observe follow-up is the final criterion for adequacy of therapy. Per

You can treat combined deficiencies with

Trinsicon®

—the multifactor hematinic



Vitamin B_{12} plus intrinsic factor (15 mcg. B_{12} activity)—helps provide adequate levels of this important vitamin.

Folic acid (1 mg.)—treats nutritional macrocytic anemias and/or malabsorption syndromes.

Ascorbic acid (75 mg.)—augments the conversion of folic acid to its active form and helps iron absorption.

Iron (110 mg.)—treats hypochromic anemia.

clinical and laboratory studies are considered essential and are recommended.

Adverse Reactions: In rare instances, iron in therapeutic doses produces gastro-intestinal reactions, such as diarrhea or constipation. Reducing the dose and administering it with meals will minimize these effects.

In extremely rare instances, skin rash suggesting allergy has followed oral administration of liver-stomach material. Instances of apparent allergic sensitization have also been reported after oral administration of folic acid.

Dosage: One Pulvule twice a day. (Two Pulvules daily produce a standard response in the average uncomplicated case of pernicious anemia.)

How Supplied: Pulvules Trinsicon® (hematinic concentrate with intrinsic factor, Lilly), in bottles of 60 and 500. [032568]

Additional information available to physicians upon request.

Eli Lilly and Company, Indianapolis, Indiana 46206.

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In peptic ulcer:



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aluminum and magnesium hydroxides *plus* simethicone

"will it ease the pain?"

Mylanta helps relieve ulcer pain with the two most widely prescribed antacids: aluminum and magnesium hydroxides.

will it help "my gassy stomach"?

Mylanta *also* contains simethicone: for concomitant relief of G.I. gas distress.

"will this one taste O. K.?"

The *prolonged* acceptance of Mylanta was recently confirmed in 87.5% of 104 patients—after a total of 20,459 documented days of therapy.* *Danhof, I. E.: Report on file.

Composition: Each Mylanta chewable tablet or teaspoonful (5 ml.) contains: magnesium hydroxide, 200 mg.; aluminum hydroxide, dried gel, 200 mg.; simethicone, 20 mg. *Dosage:* One or two tablets (well chewed or allowed to dissolve in the mouth) or one or two teaspoonfuls to be taken between meals and at bedtime.

Stuart

Division/Pasadena, Calif.
ATLAS CHEMICAL INDUSTRIES, INC.

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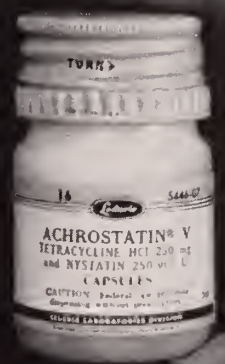
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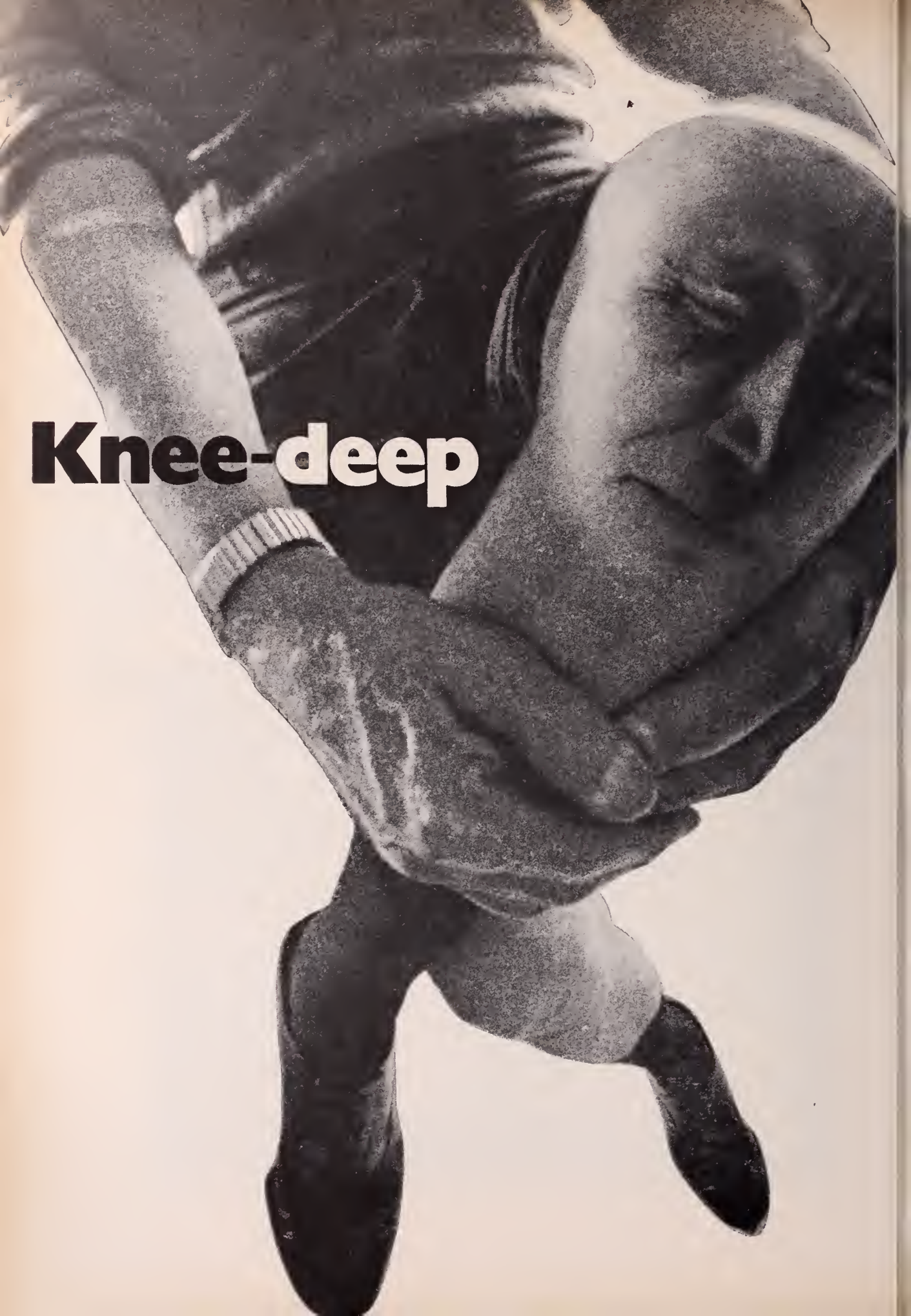
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Lederle

329-8/6094


Knee-deep

in osteoarthritic pain

If aspirin doesn't help, move in with Tandearil.

The trial period is brief: 1 week. Try one tablet q.i.d. at first. Tandearil usually starts working within 3 to 4 days. When response occurs, as little as 1 or 2 tablets daily may hold back pain and stiffness, and increase joint motion.

On the next page is a summary of adverse reactions, contraindications, warning and precautions.

Tandearil.
It can help get his mind off his knee.

Please review full Prescribing Information carefully before prescribing.

For osteoarthritic knees, spines, shoulders, hips, etc.:

Tandearil®
oxyphenbutazone

ndearil, oxyphenbutazone:
or brief summary see next page.

Geigy

TA-6006



Tandearil®
oxyphenbutazone

Contraindications: Edema; danger of cardiac decompensation; history or symptoms of peptic ulcer; renal, hepatic or cardiac damage; history of drug allergy; history of blood dyscrasia. The drug should not be given when the patient is senile or when other potent drugs are given concurrently.

Warning: This drug is an analog of phenylbutazone; sensitive patients may be cross-reactive. If coumarin-type anticoagulants are given simultaneously, watch for excessive increase in prothrombin time. Instances of severe bleeding have occurred. Persistent or severe dyspepsia may indicate peptic ulcer; perform upper gastrointestinal x-ray diagnostic tests if drug is continued. Pyrazole compounds may potentiate the pharmacologic action of sulfonylurea, sulfonamide-type agents and insulin. Carefully observe patients receiving such therapy. Use with caution in the first trimester of pregnancy, and in patients with thyroid disease.

Precautions: Before prescribing, carefully select patients, avoiding those responsive to routine measures as well as contraindicated patients. Obtain a detailed history and a complete physical and laboratory examination, including a blood count. The patients should not exceed recommended dosage, should be closely supervised and should be warned to discontinue the drug and report immediately if fever, sore throat, or mouth lesions (symptoms of blood dyscrasia), sudden weight gain (water retention), skin reactions, black or tarry stools or other evidence of intestinal hemorrhage occur. Make complete blood counts at weekly intervals during early therapy and at 2-week intervals thereafter. Discontinue the drug immediately and institute countermeasures if the white count changes significantly, granulocytes decrease, or immature forms appear. Use greater care in the elderly and in hypertensives.

Adverse Reactions: The more common are nausea and edema. Swelling of the ankles or face may be minimized by withholding dietary salt, reduction in dosage or use of diuretics. In elderly patients and in those with hypertension, the drug should be discontinued with the appearance of edema. The drug has been associated with peptic ulcer and may reactivate a latent peptic ulcer. The patient should be instructed to take doses immediately after meals or with milk to minimize gastric upset. Drug rash occasionally occurs. If it does, promptly discontinue the drug. Agranulocytosis, exfoliative dermatitis, Stevens-Johnson syndrome, Lyell's syndrome (toxic necrotizing epidermolysis), or a generalized allergic reaction similar to a serum sickness syndrome may occur and require permanent withdrawal of medication. Agranulocytosis can occur suddenly in spite of regular, repeated normal white counts. Stomatitis, salivary gland enlargement, vomiting, vertigo and languor may occur. Leukemia and leukemoid reactions have been reported. While not definitely attributable to the drug, a causal relationship cannot be excluded. Thrombocytopenic purpura and aplastic anemia may occur. Confusional states, agitation, headache, blurred vision, optic neuritis and transient hearing loss have been reported, as have hyperglycemia, hepatitis, jaundice, hypersensitivity angiitis, pericarditis and several cases of anuria and hematuria. With long-term use, reversible thyroid hyperplasia may occur infrequently. Moderate lowering of the red cell count due to hemodilution may occur.

Dosage in Osteoarthritis: Initial: 3 to 6 tablets daily in divided doses. Usually unnecessary to exceed 4 tablets daily. A trial period of one week is considered adequate to determine the therapeutic effect of the drug. Maintenance: Effective level often achieved with 1 or 2 tablets daily, should not exceed 4 tablets daily.

In selecting appropriate dosage in any specific case, consideration should be given to the patient's weight, general health, age and any other factors influencing drug response.

Availability: Tan, round, sugar-coated tablets of 100 mg. in bottles of 100 and 1000.

(B)R-46-800-A

For complete details, please see full Prescribing Information.

Geigy Pharmaceuticals
Division of
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Easy on the Budget...
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Tablets & Elixir
For Iron Deficiency Anemia

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A DIVISION OF THE DEPARTMENT OF PSYCHIATRY
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Complete facilities for evaluation of and intensive treatment of psychiatric patients, including individual psychotherapy, group therapy, psychodrama, electro-convulsive therapy, Indoklon convulsive therapy, drugs, social service work with families, family therapy and an extensive and well organized activities program, including occupational therapy, art therapy, athletic activities and games, recreational activities and outings. The treatment program of each patient is carefully supervised in order that the therapeutic needs of each patient may be realized.

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From the files of the

COMMITTEE FOR THE

STUDY OF MATERNAL MORTALITY

CASE 6-67. A 22 year old married white primigravida was hospitalized in December 1966 for treatment of pneumonia. Despite partial recovery, the patient did not progress well after this hospitalization. She had had an enlarged heart since childhood, but there was no definite history of neonatal cyanosis or rheumatic fever. She complained of increased fatiguableness, dyspnea on exertion, orthopnea, paroxysmal nocturnal dyspnea, palpitation and nocturia. She had been taking a small pink pill daily, assumed to be a digitalis preparation, but she had stopped taking this medication one week before admission.

On February 26, 1967, she was admitted because of increasing shortness of breath during the seventh month of her first pregnancy.

On examination, the patient appeared to be having acute respiratory distress. The blood pressure was 180/90, the pulse was 140 and regular, respirations were 45 and the temperature was 99.8°. The skin showed no cyanosis, rash or jaundice, and there was no cervical, axillary or inguinal lymphadenopathy. Fundoscopic examination was normal. The neck veins were distended. Specific pulsations could not be identified. The thyroid was not enlarged. The respiratory rate was rapid and the chest moved symmetrically. There was dullness to percussion halfway up the posterior chest bilaterally, and moist rales were heard on each side. On percussion of the heart, right ventricular lift was felt. The PMI was in the sixth intercostal space in the left anterior axillary line. There was a grade III/VI pansystolic murmur along the left sternal border. The pulmonic closure sound was increased. No diastolic murmur could be heard nor was any gallop present. The abdomen showed the expected tumor of pregnancy, with the fundus two fingerbreadths below the xiphoid process. The liver was four fingerbreadths below the right costal margin and rested directly on the uterine fundus. The femoral, radial and dorsalis pedis pulses could be felt bilaterally. Rectal and pelvic examinations were deferred. The extremities showed three plus pitting edema. There was no clubbing. Neurological examination was normal. The impression was one of acute pulmonary edema secondary to underlying heart disease and intrauterine pregnancy of seven months' duration.

Laboratory determinations on admission included the following: hemoglobin 14.0 gm, hematocrit 43; white blood count 24,000 with 61 segmented neutrophils, 31 stab neutrophils, 5 lymphocytes, and 3 monocytes. Urinalysis showed a specific gravity of 1.028, ph 5.0, 1 + acetone, no glucose, and 1 + proteinuria. 20 WBC per high power field, and numerous epithelial cells. A sputum specimen showed Neisseria, alpha Streptococci and Streptococcus epidermidis. The fasting blood glucose was 106 mg%, and the blood urea nitrogen was 17 mg%. Electrolyte determinations were as follows: sodium 138 mEq/l, potassium 5.0 mEq/l, carbon dioxide 9.5 mEq/l, and chlorides 98 mEq/l.

Immediate treatment consisted of the nasal administration of oxygen at four liters per minute, 2 cc of mercuhydrin, and Digoxin 0.5 mg intramuscularly. At the same time, an intravenous infusion of 5% dextrose in water containing 20 mEq of potassium chloride was started. Approximately one-half hour after the patient received the initial medication she became confused and agitated and complained of generalized numbness and tingling, followed by sudden respiratory arrest. External cardiac massage was begun immediately, and a nasogastric tube was inserted. The resuscitation attempts which followed involved the administration of sodium bicarbonate, epinephrine intravenously and by intracardiac injection, isuprel, Levophed, and regular insulin. A continuous electrocardiographic monitor showed ventricular fibrillation which could not be reversed by electrical defibrillation. She was pronounced dead at 5:05 a.m. on February 26, 1967.

The obstetrician in attendance during the time of resuscitation was consulted as to the possibility of performing a cesarean section in an attempt to save the child which appeared from the size of the uterus to be the size of slightly more than seven months' gestation. Because the blood pressure could not be maintained during resuscitation, it was decided that the placenta was too poorly perfused and that cesarean section was not indicated.

Permission for autopsy was granted. The final diagnoses were: rheumatic heart disease with severe mitral stenosis; congestive heart failure; bronchopneumonia; and uterine pregnancy, seven months' gestation.

Comments

The Committee classified this case as an indirect obstetric death with possible preventable factors on the part of the medical attendants. The suggestion was made that the initial intravenous therapy may have been poorly chosen. The decision not to perform postmortem cesarean section was probably well taken, although from the purely medical standpoint nothing would have been lost by attempting it, and a live baby might possibly have been delivered.

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Warning: In renal impairment, since liver toxicity is possible, lower doses are indicated; during prolonged therapy consider serum level determinations. Photodynamic reaction to sunlight may occur in hypersensitive persons. Photosensitive individuals should avoid exposure; discontinue treatment if skin discomfort occurs.

Precautions: Drowsiness, anorexia, slight gastric distress can occur. In excessive drowsiness, consider longer dosage intervals. Persons on full dosage should not operate vehicles. Nonsusceptible organisms may overgrow; treat superinfection appropriately. Treat beta-hemolytic streptococcal infections at least 10 days to help prevent rheumatic fever or acute glomerulonephritis. Tetracycline may form a stable calcium complex in bone-forming tissue and may cause dental staining during tooth development (last half of pregnancy, neonatal period, infancy, early childhood).

Adverse Reactions: *Gastrointestinal*—anorexia, nausea, vomiting, diarrhea, stomatitis, glossitis, enterocolitis, pruritus ani. *Skin*—maculopapular and erythematous rashes; exfoliative dermatitis; photosensitivity; onycholysis, nail discoloration. *Kidney*—dose-related rise in BUN. *Hypersensitivity* reactions—urticaria, angioneurotic edema, anaphylaxis. *Intracranial*—bulging fontanels in young infants. *Teeth*—yellow-brown staining; enamel hypoplasia. *Blood*—anemia, thrombocytopenic purpura, neutropenia, eosinophilia. *Liver*—cholestasis at high dosage.

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Warnings: Not of value in psychotic patients. Caution against hazardous occupations requiring complete mental alertness. When used adjunctively in convulsive disorders, possibility of increase in frequency and/or severity of grand mal seizures may require increased dosage of standard anticonvulsant medication; abrupt withdrawal may be associated with temporary increase in frequency and/or severity of seizures. Advise against simultaneous ingestion of alcohol and other CNS depressants. Withdrawal symptoms have occurred following abrupt discontinuance. Keep addiction-prone individuals under careful surveillance because of their predisposition to habituation and dependence. In pregnancy, lactation or women of childbearing age, weigh potential benefit against possible hazard.

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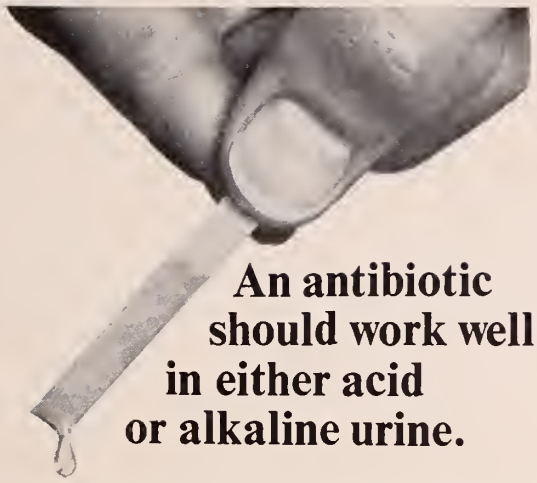
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Precautions: Overgrowth of nonsusceptible organisms may occur. Constant observation is essential. If new infections appear, appropriate measures should be taken. In infants, increased intracranial pressure with bulging fontanels has been observed. All signs and symptoms have disappeared rapidly upon cessation of treatment.

Side Effects: Gastrointestinal system – anorexia, nausea, vomiting, diarrhea, stomatitis, glossitis, enterocolitis, pruritus ani. Skin – maculopapular and erythematous rashes; a rare case of exfoliative dermatitis has been reported. Photosensitivity; onycholysis and discoloration of the nails (rare). Kidney – rise in BUN, apparently dose-related. Transient increase in urinary output, sometimes accompanied by thirst (rare). Hypersensitivity reactions–urticaria, angioneurotic edema, anaphylaxis. Teeth – dental staining (yellow-brown) in children of mothers given this drug during the latter half of pregnancy, and in children given the drug during the neonatal period, infancy and early childhood. Enamel hypoplasia has been seen in a few children. If adverse reaction or idiosyncrasy occurs, discontinue medication and institute appropriate therapy. Demethylchlortetracycline may form a stable calcium complex in any bone-forming tissue with no serious harmful effects reported thus far in humans.

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MESSAGE FROM THE PRESIDENT



"IT'S A fast, fast, fast changing world—are we capable of changing with it?" This serious and very pertinent question was posed by Oklahoma's Lt. Governor George Nigh at the conclusion of his most entertaining President's Luncheon address during the KMA Annual Meeting in September.

The world of the medical profession is changing, as is the world around us, and the vast majority of the members of the profession are trying to change with it. Physicians have cooperated in an effort to make Medicare work for the benefit of the elderly; they have been unbelievably patient with the administrative and bureaucratic monstrosity called Medicaid; they have given sound advice and guidance to programs for Appalachia; without the physicians the Head Start Programs would not have gotten off the ground. These are but a few of the areas in which physicians, as individuals and as professional organizations, have accepted change and re-doubled their efforts toward "the prevention and cure of disease and in prolonging and adding comfort to life".

Our willingness to change and to cooperate, however, is apparently not enough. There are still those who seek to make the medical profession the scapegoat for the failures of the politicians, bureaucrats and social-planners.

The cost of Medicare has zoomed, as Medicine had predicted it would, and the finger is pointed at "doctors' fees". Yet, even a casual glance at the figures shows that the greatest single factor in this increased cost is hospital charges. Medicaid was an ill-conceived, poorly studied "shotgun" approach to a tremendously complex problem which was doomed to failure from the start because it promised more than could be delivered. What is the government's answer? Decrease the number of eligible beneficiaries, cut the appropriation of funds, and establish payment for physicians' services "on a basis other than usual and customary charges". They insist that everyone has a right to the same high quality medical care—but some are to get it at cut-rate prices!

There are some who contend that the health problems of the ghettos are the crux of the problem in these areas, and demand that the medical profession solve

the problem. This is indeed an over-simplification. We did not create the slums. Who is responsible for the deterioration of these areas over the years; who is guilty of permitting the overcrowded living conditions; whose responsibility has it been to provide educational advantages for these individuals, to provide job opportunities, and transportation so that, rather than being "locked-in", they could take advantage of the opportunities offered?

These are the problems of the slums, and of the other poverty areas. Health care is one of them and as physicians, we recognize our obligations in that field. As "socially conscious" citizens we also recognize the magnitude of the other problems. Physicians, however, are not automatically experts in sociology, anthropology, economics, education, sanitary engineering, or even politics.

Solution of these problems demands the cooperation of all of the available "experts", as well as a great deal of cooperation on the part of those who stand to benefit most from these efforts.

I believe that Medicine is capable of changing with this fast, fast, changing world. I wonder if others are willing to change—or if the word "doctor" will continue to be a "dirty word" in the eyes of the bureaucrats and social planners!

Henry B. Asman

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Summation:
In addition to its primary indications for duodenal and gastric ulcer, Robinul Forte (glycopyrrolate) is indicated for other G-I conditions that may benefit from anticholinergic therapy. Robinul-PH Forte (glycopyrrolate 2 mg. with phenobarbital) is indicated when these situations are complicated by mild anxiety and tension.

Contraindications: Glaucoma, urinary bladder neck obstruction, pyloric obstruction, stenosis with significant gastric retention, prostatic hypertrophy, duodenal obstruction, cardiospasm (megaesophagus), and achalasia of the esophagus, and in the case of Robinul-PH Forte, sensitivity to phenobarbital.

Precautions: Administer with caution in the presence of incipient glaucoma.

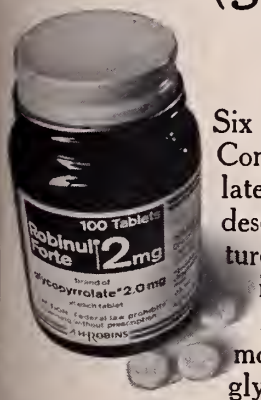
Adverse Reactions: Dryness of the mouth, blurred vision, urinary difficulties, and constipation are rarely troublesome and may generally be controlled by reduction of dosage. Other side effects associated with the use of anticholinergic drugs include tachycardia, palpitation, dilatation of the pupil, increased ocular tension, weakness, nausea, vomiting, headache, dizziness, drowsiness, and rash.

Dosage: Should be adjusted according to individual patient response. Average and maximum recommended dose is 1 tablet three times a day; at the a.m., early p.m., and at bedtime. See product literature for full prescribing information.

Supply: Robinul (glycopyrrolate 1 mg.): Robinul Forte (glycopyrrolate 2 mg.): Robinul-PH (glycopyrrolate 1 mg.) with phenobarbital 16.2 mg. (Warning: may be habit forming); Robinul-PH Forte (glycopyrrolate 2 mg.) with phenobarbital 16.2 mg. (Warning: may be habit forming), in bottles of 100 and 500 tablets. A. H. Robins Company, Richmond, Va. 23220.

A·H·ROBINS

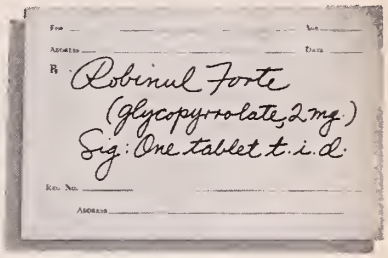
In peptic ulcer therapy, won't you give Robinul® Forte a Fair Trial?
(glycopyrrolate)



Six years ago the A. H. Robins Company introduced glycopyrrolate, a unique anticholinergic agent described in the prescribing literature as more closely approaching the ideal compound for controlling gastric hyperacidity and hypermotility of the G-I tract. Although glycopyrrolate (Robinul Forte) found good acceptance among numerous physicians, many others just didn't seem to want to give it a try, probably because the anticholinergic they were already using was giving acceptable results.

However, we believe you'll agree there's always room for a better anticholinergic. This is why we're asking you to give Robinul Forte a fair trial. Robinul Forte exerts a highly specific antisecretory action and marked inhibitory effect on intestinal tone. We're convinced you'll agree that this is indeed an outstanding drug when you observe its outstanding suppression of ulcer symptoms. Furthermore, it is unique in that it reduces intestinal tone, yet has little or no effect on peristalsis. In addition, the incidence of the more bothersome peripheral side effects is low.

No longer does the physician have to look for extreme dry mouth as the measure of his anticholinergic's effectiveness. The only way we can demonstrate to you firsthand the efficacy of glycopyrrolate (Robinul Forte) is for you to try it in your practice. That's why we're asking you to give it a Fair Trial. How can you give it a Fair Trial? You do it this way:



First: When you see your very next ulcer patient, write him a script as shown.

Next: Wait 10 days or until your patient comes in for his next appointment and get his "verdict" as to how he feels. Examine all the evidence and make your evaluation of his condition.



Finally: Render **your** verdict. If it's "significant improvement and marked relief of symptoms," then we believe you'll agree that Robinul Forte has proved its worth, and we rest our case. If not, consider our case for Robinul Forte closed. That's a Fair Trial, Doctor, and it's all we ask.

Robinul® Forte
(glycopyrrolate, 2 mg.)

The summation is an important part of every case. You'll find ours on the preceding page, Doctor.



THE INSURANCE PAGE



HEW Pushes Group Practice

FOR THE past year, officials of the Department of Health, Education and Welfare have been proclaiming the gospel of reduced medical costs. In national conference after national conference, in committee after committee, they have lashed out from Washington against sins of omission and commission in the health care field: Thou shalt not raise thy fees. Thou shalt plan carefully. Thou shalt spend thy federal dollars wisely.

For the past year, the HEW evangelists, with help from labor chiefs, have been pushing "Group Practice" as the broad spectrum cure for all that ails the health care system in this country. When they say "Group Practice", however, they don't mean just any group arrangement of physicians; they mean specifically non-medically controlled closed panel prepaid group practice. Thus, by the subterfuge of devious definition, they hope to sell the public a product other than that advertised, just as social security is sold as "insurance" rather than tax.

The House of Delegates of the AMA at the 1968 annual convention took note of this attempt to sell the American people one kind of medical practice. "It is obvious", said a House reference committee, "that a major difficulty exists because of the loose use of the term 'group practice' and the increasing tendency for the term 'group practice' to be associated with non-medically controlled closed panel prepaid group practices. Established AMA policy states that medical care plans should be controlled by physicians insofar as determination of medical policy and medical administration is concerned and that freedom of choice of physicians with free competition among physicians (health care delivery systems) are prerequisites to optimal medical care. The assessment of any specific system of practice organization must be made on the basis of the degree to which it embodies those characteristics."

Rather than face the cold fact that group practice has gained poor acceptance among patients and physicians alike, HEW wants to force feed its growth by means of federal subsidies. The reason for this desire, on the part of HEW, is obvious. If group practice is *subsidized* by the federal government, it will inevitably be *controlled* by the federal government. The government, not the consumers and providers of medical service, will determine patterns of practice. This effort will be made despite the fact that there is as yet no evidence that prepaid group practice or private group clinics provide better medical care at appreciably lower costs to the consumer.

If subsidies are forthcoming (and they are perhaps inevitable), they will be reminiscent of the Greek bearing gifts. The federal government does not subsidize an effort without reasons for doing so and these reasons usually add up to subsequent and direct control of the individuals or groups involved.

WILLIAM W. HALL, M.D.



Help clear up that miserable stuffed-up feeling with Dimetapp. Each hard-working Extentab brings welcome relief from the stuffiness, drip and congestion of upper respiratory conditions for up to 10-12 hours. Yet, patients seldom experience drowsiness or overstimulation. The key to success is the Dimetapp formula: Dimetane (brompheniramine maleate)—along with phenylephrine and phenylpropanolamine, two time-tested decongestants. They get the job done . . . in a hurry.

Indications: Dimetapp is indicated for symptomatic relief of the allergic manifestations of respiratory illnesses, such as the common cold and bronchial asthma, seasonal allergies, sinusitis, rhinitis, conjunctivitis, and otitis.
Contraindications: Hypersensitivity to antihistamines. Not recommended for use during pregnancy.
Precautions: Until patient's response has been determined, he should be cautioned against engaging in operations requiring alertness. Administer with care to patients with cardiac or peripheral vascular diseases or hypertension.
Side Effects: Hypersensitivity reactions including skin rashes, urticaria, hypotension and thrombocytopenia, have been reported on rare occasions. Drowsiness, lassitude, nausea, giddiness, dryness of the mouth, mydriasis, increased irritability or excitement may be encountered.
Dosage: 1 Extentab morning and evening.
Supplied: Bottles of 100 and 500.

A.H. ROBINS COMPANY
RICHMOND, VA. 23220
A·H·ROBINS

in sinusitis, colds, U.R.I.
Dimetapp® Extentabs®
(Dimetane® [brompheniramine maleate], 12 mg.; phenylephrine HCl, 15 mg.; phenylpropanolamine HCl, 15 mg.)
up to 10-12 hours clear breathing on one tablet



LOW-BACK PAIN

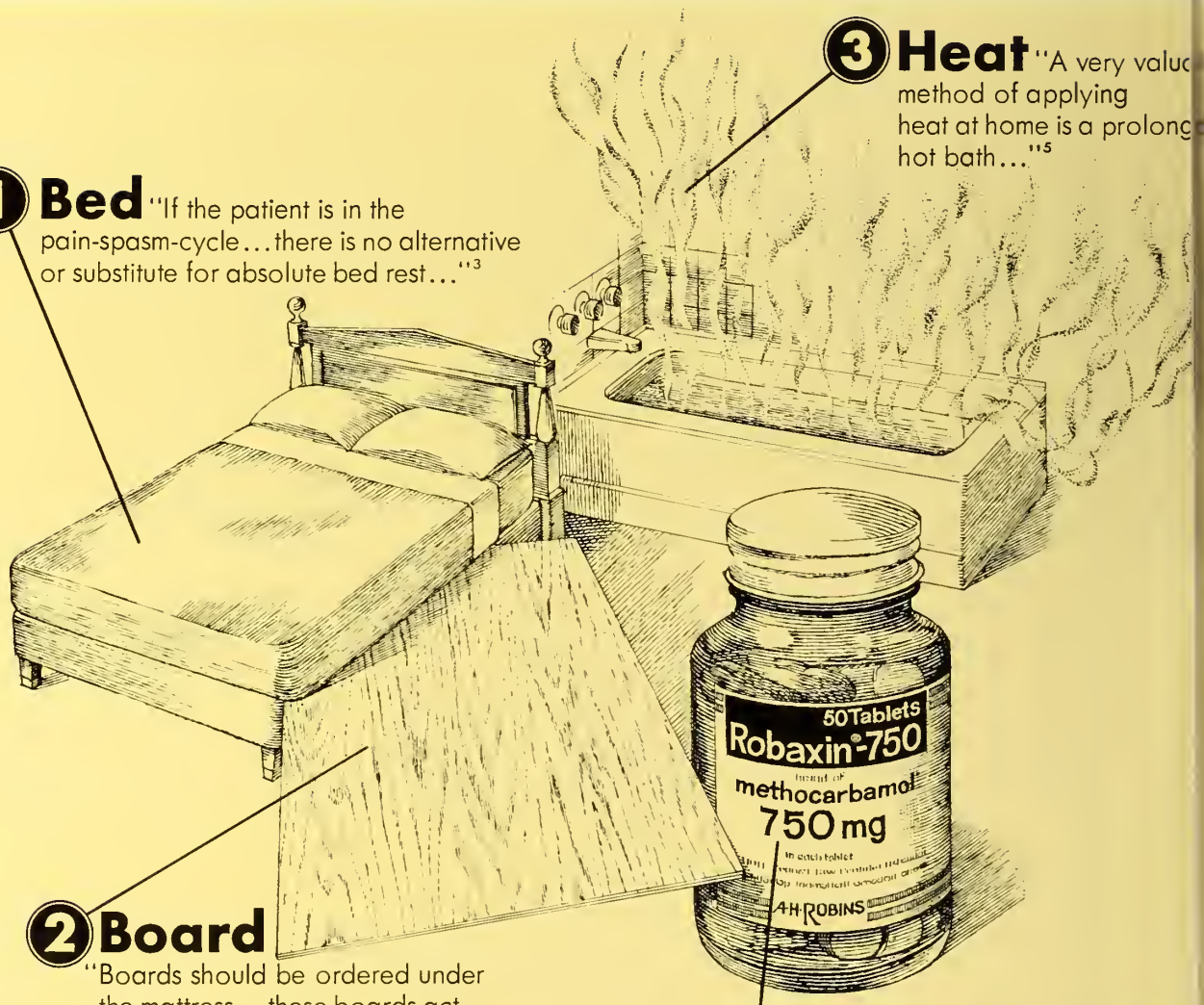
A CONSERVATIVE, FOUR-POINT PROGRAM

The low back pain that is most frequently seen in general practice is mechanical in nature, i.e., postural back pain, joint dysfunction and acute back strain.[1,2] For this type of discomfort, a conservative regimen is usually sufficient to relieve aches and pains, and to help keep the patient functioning. Components of this basic program include:

1 Bed "If the patient is in the pain-spasm-cycle...there is no alternative or substitute for absolute bed rest..."[3]

2 Board "Boards should be ordered under the mattress...these boards act by immobilizing the spine..."[4]

3 Heat "A very valuable method of applying heat at home is a prolonged hot bath..."[5]



4 Robaxin®-750 (methocarbamol, 750 mg. capsule-shaped tablets) A well-tolerated[6] skeletal muscle relaxant, methocarbamol helps relieve spasm "...without interfering with normal tone and movement."[7] And there is little likelihood of sedation.[6]

Indicated for relief of skeletol muscle spasm. **Contraindicated** in hypersensitive potients. **Side Effects** (lightheodedness, dizziness, drowsiness, nousea) moy occur rorely, but usuolly disappeor on reduced dasoge. Hypersensitivity reactians develop infrequently. See product literoture for further detoils. **Also available:** Robaxin® Toblets (methocorbomol, 500 mg.) Roboxin Injectoble (methocorbomal, 1 Gm./10 cc.)

References: (1). Gadfrey, C.M.: Applied Therap. 8:950, 1966. (2). Gottschalk, L.A.: GP 33:91, 1966. (3). Rowe, M.L.: J. Occup. Med. 2:219, 1960. (4). Cozen, L.: South Dokato J. Med. 18:26, 1965. (5). Sata-Hall, R.: Med. Sc. 14:23, 1963. (6). Weiss, M. ond Weiss, S.: J. Am. Osteopath. A. 62:142, 1962. (7). Feuer, S.G., *et ol.*: New York J. Med. 62:1985, 1962.

A·H·ROBINS A. H. ROBINS COMPANY RICHMOND, VIRGINIA 232

the antacid puzzle

In peptic ulcer:



solved by Mylanta®

aluminum and magnesium hydroxides *plus* simethicone

"will it ease the pain?"

Mylanta helps relieve ulcer pain with the two most widely prescribed antacids: aluminum and magnesium hydroxides.

will it help "my gassy stomach"?

Mylanta *also* contains simethicone: for concomitant relief of G.I. gas distress.

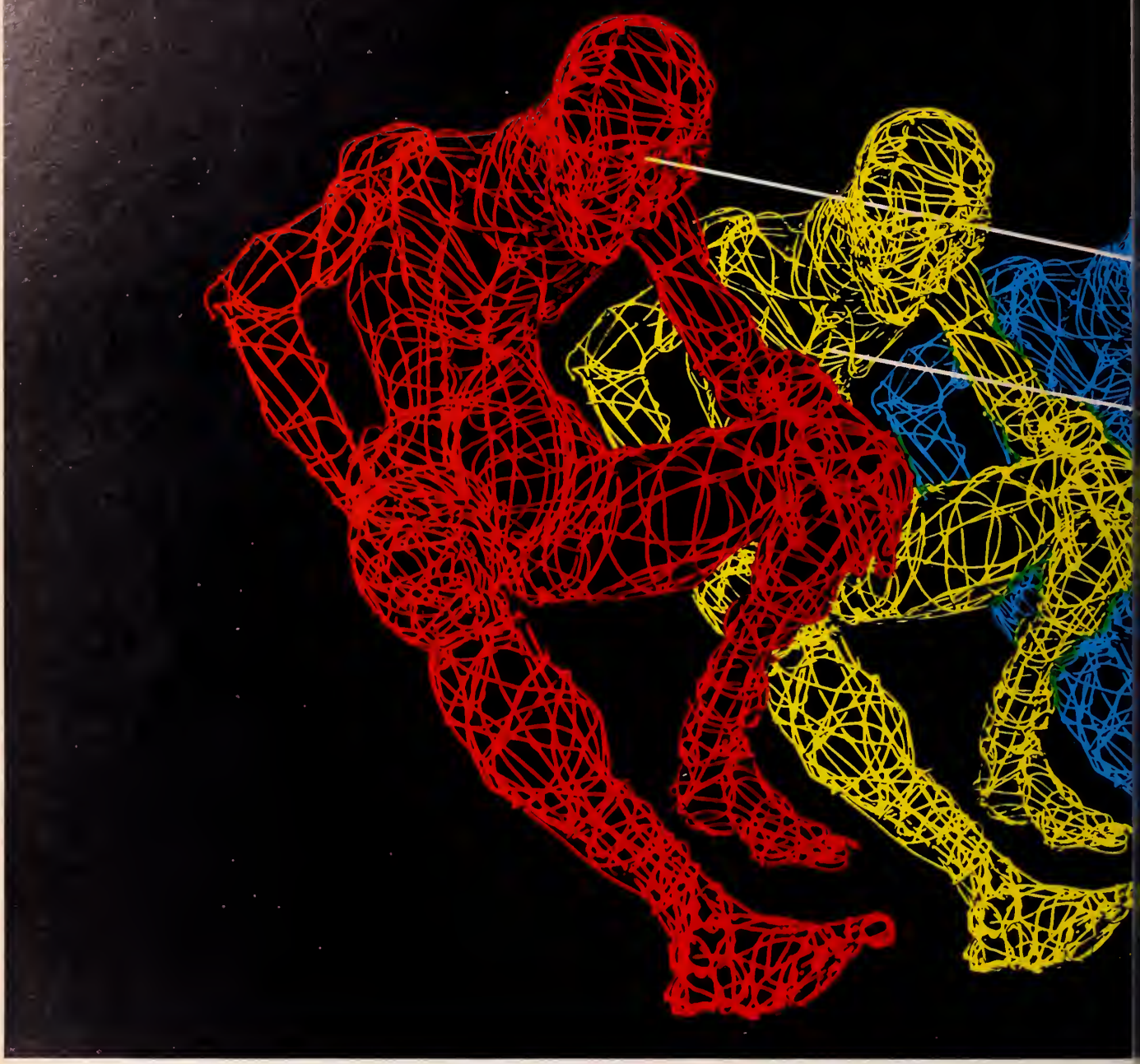
"will this one taste O. K.?"

The *prolonged* acceptance of Mylanta was recently confirmed in 87.5% of 104 patients—after a total of 20,459 documented days of therapy.* *Danhof, I. E.: Report on file.

Composition: Each Mylanta chewable tablet or teaspoonful (5 ml.) contains: magnesium hydroxide, 200 mg.; aluminum hydroxide, dried gel, 200 mg.; simethicone, 20 mg. *Dosage:* One or two tablets (well chewed or allowed to dissolve in the mouth) or one or two teaspoonfuls to be taken between meals and at bedtime.

Stuart Division/Pasadena, Calif.
ATLAS CHEMICAL INDUSTRIES, INC.

a comprehensive hematinic



Description: Each Pulvule® contains—

Special Liver-Stomach Concentrate, Lilly (containing Intrinsic Factor)	150 mg.
Cobalamin Concentrate, N.F., equivalent to Cobalamin (The total vitamin B_{12} activity in the Special Liver-Stomach Concentrate, Lilly, and the Cobalamin Concentrate, N.F., is 15 micrograms.)	7.5 mcg.
Iron, Elemental (as Ferrous Fumarate)	110 mg.
Ascorbic Acid (Vitamin C)	75 mg.
Folic Acid	1 mg.

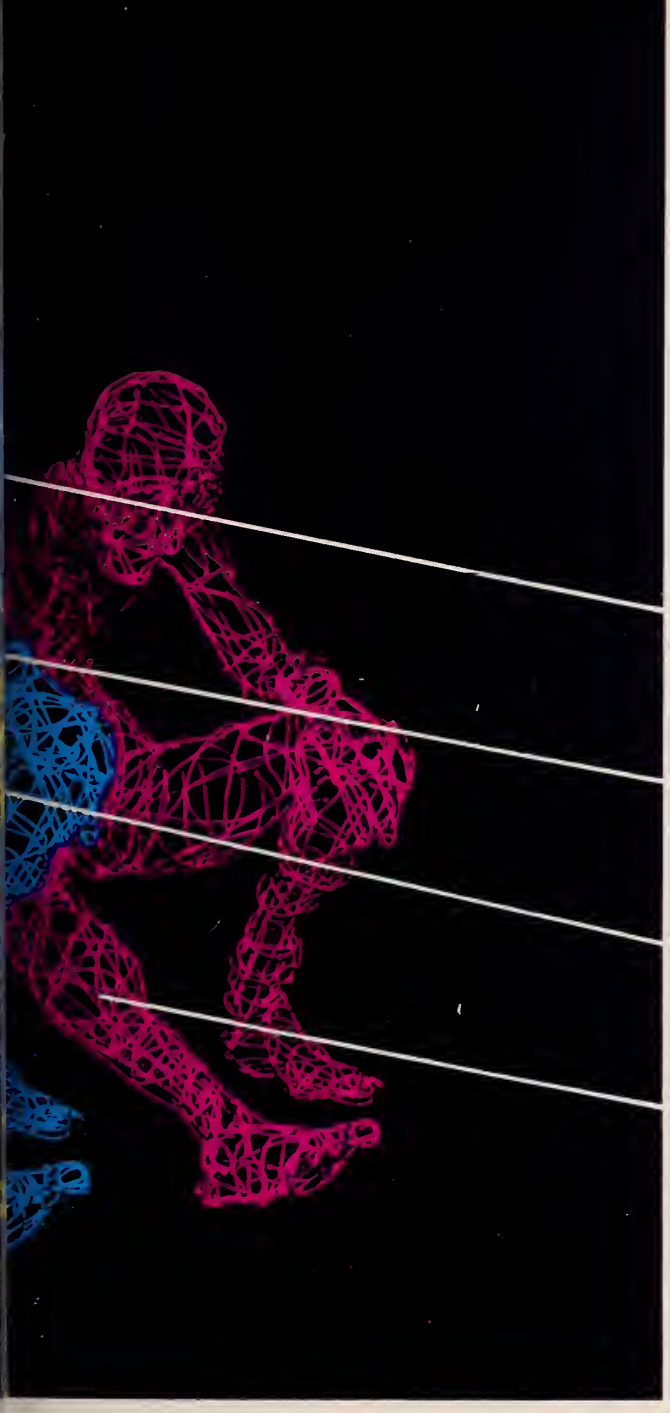
Indications: Trinsicon® (hematinic concentrate with intrinsic factor, Lilly) is a multifactor preparation effective in the treatment of anemias that respond to oral hematinics, including pernicious anemia and other megaloblastic anemias and also iron-deficiency anemia.

Contraindications: Hemochromatosis and hemosiderosis.

Precautions: Anemia is a manifestation that requires approp
investigation to determine its cause or causes.

In pernicious anemia, the use of folic acid without adeq
vitamin B_{12} therapy may result in hematologic remission but
rological progression. Adequate doses of vitamin B_{12} (parent
or oral with potent intrinsic factor as in Trinsicon® [hema
concentrate with intrinsic factor, Lilly]) usually prevent, hal
improve the neurological changes.

As with all preparations containing intrinsic factor, resist
may develop in some cases of pernicious anemia to the pote
tion of absorption of physiological doses of vitamin B_{12}. If re
ance occurs, parenteral therapy, or oral therapy with so-c
massive doses of vitamin B_{12}, may be necessary. No single
men fits all cases, and the status of the patient observe
follow-up is the final criterion for adequacy of therapy. Peri



You can treat combined deficiencies with

Trinsicon®

—the multifactor hematinic

Vitamin B_{12} plus intrinsic factor (15 mcg. B_{12} activity)—helps provide adequate levels of this important vitamin.

Folic acid (1 mg.)—treats nutritional macrocytic anemias and/or malabsorption syndromes.

Ascorbic acid (75 mg.)—augments the conversion of folic acid to its active form and helps iron absorption.

Iron (110 mg.)—treats hypochromic anemia.

linical and laboratory studies are considered essential and are ecommended.

dverse Reactions: In rare instances, iron in therapeutic doses roduces gastro-intestinal reactions, such as diarrhea or consti- ation. Reducing the dose and administering it with meals will inimize these effects.

In extremely rare instances, skin rash suggesting allergy has llowed oral administration of liver-stomach material. Instances f apparent allergic sensitization have also been reported after ral administration of folic acid.

osage: One Pulvule twice a day. (Two Pulvules daily produce a tandard response in the average uncomplicated case of perni- ious anemia.)

ow Supplied: Pulvules Trinsicon® (hematinic concentrate with ntrinsic factor, Lilly), in bottles of 60 and 500. [032568]

Additional information available to physicians upon request.

Eli Lilly and Company, Indianapolis, Indiana 46206.

801668

Lilly



"The inconvenience of a cold"

For a cold, NTZ® Nasal Spray provides rapid relief of nasal symptoms. Relief starts with the first spray which opens the inferior part of the common meatus. A second spray, a few minutes later, will shrink the turbinates to help provide sinus drainage and ventilation. Dosage may be repeated every three or four hours as needed, for temporary relief of symptoms. NTZ is well tolerated but overdosage should be avoided.

As a sinusitis deterrent, NTZ Nasal Spray can be used to keep the nasal passages open during a cold to help prevent development of acute sinusitis—or to help prevent the acute condition from becoming chronic.

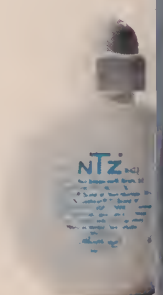
Supplied: NTZ Nasal Spray, plastic squeeze bottles of 20 ml.; NTZ Nasal Solution, bottles of 30 ml. (1 fl. oz.) with dropper.

NTZ is more than a simple vasoconstrictor. It contains

Neo-Synephrine® (brand of phenylephrine) HCl 0.5 per cent, the major component, virtually synonymous with fast, efficient but gentle nasal vasoconstriction.

Thenfadil® (brand of thenyldiamine) HCl 0.1 per cent, topical antihistamine for reduction of rhinorrhea, sneezing or itching. It combats the allergic reactions that may occur in colds or sinusitis.

Zephiran® (brand of benzalkonium, as chloride, refined) 1:5000, antiseptic preservative and wetting agent to promote penetration and spread of the formula.



Winthrop Laboratories, New York, N.Y. 10016 Winthr

The muscle relaxant that works before you write a prescription

Relieve painful skeletal muscle spasm in your office in minutes with a single 2 cc. injection of NORFLEX. Then, for sustained relief, write a prescription for NORFLEX tablets, 1 tablet b.i.d.

CONTRAINDICATIONS: Due to its anticholinergic action, NORFLEX should not be used in patients with glaucoma, pyloric or duodenal obstruction, stenosing peptic ulcer, prostatic hypertrophy or obstruction at the bladder neck, cardiospasm (megaesophagus) and myasthenia gravis. Use with caution in patients with tachycardia. Do not use propoxyphene (Darvon®) concurrently.

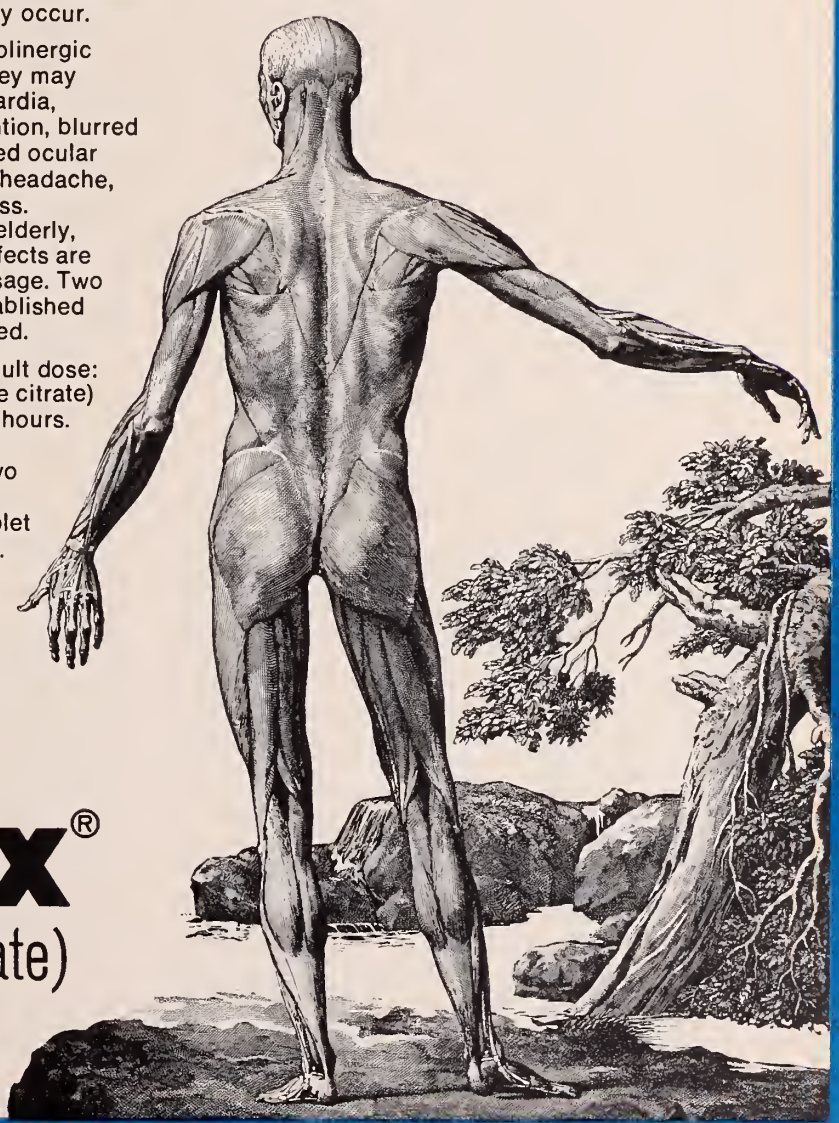
WARNING: Transient lightheadedness or dizziness following NORFLEX-INJECTABLE may occur.

SIDE EFFECTS: Due mainly to anticholinergic action and usually at high dosage. They may include dryness of the mouth, tachycardia, palpitation, urinary hesitancy or retention, blurred vision, dilatation of the pupil, increased ocular tension, weakness, nausea, vomiting, headache, dizziness, constipation, and drowsiness. Infrequently, mental confusion in the elderly, urticaria or other dermatoses. Side effects are usually eliminated by reduction in dosage. Two cases of aplastic anemia, with no established causal relationship, have been reported.

DOSAGE: **INJECTABLE** — Average adult dose: one ampul, 2 cc. (60 mg. orphenadrine citrate) I.M. or I.V. May be repeated every 12 hours. Relief may be maintained with one NORFLEX tablet b.i.d. **TABLETS** — Two tablets per day for adults, one in the morning, one in the evening. Each tablet contains 100 mg. orphenadrine citrate.

For full information, see Package Insert or P.D.R.

Riker Laboratories
Northridge, California 91324



Norflex®
(orphenadrine citrate)

PUBLIC HEALTH PAGE

Kentucky's Role in the National Nutrition Survey†

RUSSELL E. TEAGUE, M.D., M.P.H.

Commissioner of Health

Commonwealth of Kentucky

CONGRESS has given the Secretary of Health, Education, and Welfare the responsibility of making a survey to determine the incidence and location of serious hunger and malnutrition, and related health problems in the United States.

Such a survey has never been made in the United States, even though during the last 12 years the Interdepartmental Committee on Nutrition for National Defense, better known as ICNND, has done surveys in many other countries. The methods, procedures and standards have been published in the *Manual for Nutrition Surveys,* and are being used as guidelines in developing plans for the National Nutrition Survey.

Why a National Survey? Some evidence indicates that malnutrition, and even hunger, does exist in parts of the United States. There is not enough factual information to indicate the extent, the exact location and the reasons for these conditions. Malnutrition appears to be more common in poverty areas. However, malnutrition may be due to other factors such as: (1) ignorance of nutritive value of foods, (2) personal food preferences, (3) cultural or religious eating patterns, (4) diets restricting food intake, (5) changes in food consumption patterns and (6) limited food sources which result in restriction of certain nutrients. Malnutrition may also be secondary to illness, malabsorption, or parasites.

Congress is hoping for answers to the questions as soon as possible in order to consider how the situations may be improved. Because of time limitations, initial studies in six to eight selected states will be done. These states represent broad geographic regions of the United States. Kentucky is one of the states chosen to participate and the Kentucky State Department of Health has been designated as the contracting agency.

Professional groups such as the American Medical Association and the American Academy of Pediatrics have expressed interest and support for the survey, as well as the Kentucky Medical Association, Kentucky Departments of Education, Agriculture, Welfare and the universities and medical schools.

One unique feature of the survey is that identical methods will be used in each state for collecting and analyzing data. Thus, results in each study will be comparable. In addition to comprehensive data on food intake of the household as a unit, plus individual records on the 24-hour recall of selected individuals, all family members will have a physical examination, a dental examination, selected anthropometric measurements made, and a medical history recorded. Members of selected families will have laboratory work done (blood and urine) for hematological and biochemical analyses, measurements and wrist X-Rays made to determine bone density.

The Kentucky State Department of Health and the Nutrition Program, U.S. Public Health Service, with guidance from advisory committees and other experts, will serve as coordinators of the survey.

Cooperation of local communities is very important. Before the survey team arrives in a community which has been selected for study, and while they are there, local support is needed. Publicity of the type most appropriate for each area is needed to let the people know about the survey. Most important of all, people need to be motivated to be willing to participate in the study.

Assistance of the local health department staff will be needed at the time of the survey to give local identity to the study. The superintendent of schools in the area will be informed about the survey and urged to cooperate as will the members of the local Board of Health, Medical Society, Welfare, Extension, and Community Action offices and others who would have an interest.

After Kentucky was selected to take part in the study, statistical methods were used to select counties which are to be included. Twenty-one counties have been given this opportunity. Selection of census enumeration districts within counties and household units within these districts will be based on a probability sample. Counties to be included are: Allen, Bath, Bell, Bourbon, Breathitt, Caldwell, Clinton,

†*This article was prepared by Joella Sisler, B.S., M.S., Director, Nutrition Program, Kentucky State Department of Health, 275 East Main Street, Frankfort, Kentucky 40601*

Crittenden, Daviess, Fayette, Floyd, Grayson, Hopkins, Jefferson, Kenton, Knott, Madison, Menifee, Perry, Pulaski and Wayne. There will be 62 enumeration districts involved, with 20 households in each enumeration district, which would indicate a total of 1,240 households or about 6,000 Kentuckians in all.

In addition to information recorded on members of selected households during the survey, general descriptive information will be collected to help characterize communities in which these people live. Other general information is desirable such as: (1) availability of health care facilities, (2) variety and cost of foods available in the area, (3) numbers of children who eat the school lunch, (4) availability and acceptance of donated foods or food stamps, (5) community income level, (6) unemployment rate, (7) availability of jobs, and (8) number of mothers working outside the home with possible effects on family eating patterns.

Plans are being formulated for the survey to begin by November 1, 1968.

How may survey results be used? If malnutrition is prevalent and factors contributing to malnutrition can be identified, then recommendations can be developed for programs to overcome and prevent these problems. The results of the survey will be of major interest to many state and local agencies such as the health department, extension service, Department of Education, Welfare Department, Department of Agriculture, colleges and universities, medical and dental schools, research units, state and local units of government, medical and paramedical groups, O.E.O. programs, and other state and local organizations. The use that these people make of the results of the survey will determine its success.

Malnutrition leads to deterioration of physical fitness and mental deficiency, to emotional and personality disturbances and to reduction in capacity to perform work. Nutrition plays a vital role in the health of all. If the problems of malnutrition in Kentucky can be identified and corrective programs negotiated, all of Kentucky will benefit.

ALL SPECIALTIES NEEDED for hospital based group practice, 90 bed JCAH hospital, county population 50,000, diversified industries, good schools, housing available, hunting and fishing. Apply Murphy Medical Center Inc. Box 89 Warsaw Indiana 46580. Call collect Mrs. S. C. Murphy, Adm. 219-267-3121, Extension 63.



One by one the family's downed Because the G.I. bug's around

Parepectolin for quick relief of acute diarrhea
... soothes colicky pain with paregoric*
... consolidates fluid stools with pectin
... adsorbs irritants with kaolin,
and protects intestinal mucosa

Whether it's a 24-hour "bug", a food problem, or simply nervousness and anxiety, Parepectolin will bring the diarrhea under control until etiology can be determined. In some cases, Parepectolin may be all the therapy necessary.

Parepectolin®

Each fluid ounce of creamy white suspension contains:
*Paregoric (equivalent) ..... (1.0 dram) 3.7 ml.
Contains opium (¼ grain) 15 mg. per fluid ounce.
warning: may be habit forming
Pectin ..... (2½ grains) 162 mg.
Kaolin (specially purified) .... (85 grains) 5.5 Gm.
(alcohol 0.69%)
Usual Adult Dose: One or two tablespoonfuls three times daily.
Usual Children's Dose: One or two teaspoonfuls three times daily.

RORER

WILLIAM H. RORER, INC.
Fort Washington, Pa.

Continuing Educational Opportunities

From The

KMA Postgraduate Medical Education Office

IN KENTUCKY

NOVEMBER

12-13 "Small-for-Date Infant Symposium," department of pediatrics, University of Louisville School of Medicine, Stouffer's Inn, Louisville

13-16 "Initial Emergency Care and Transportation of the Sick and Injured," 3-1/2 day course, University of Kentucky, Lexington

DECEMBER

5 Eleventh Annual Norton Seminar, Norton Memorial Infirmary, Louisville

IN SURROUNDING STATES

NOVEMBER

11-15 American Public Health Association Annual Meeting, Cobo Hall, Detroit, Mich.

18-21 Southern Medical Association Annual Meeting, New Orleans, La.

DECEMBER

1-4 American Medical Association, Annual Clinical Convention, Miami Beach, Fla.

9-11 Southern Surgical Association Meeting, Boca Raton Hotel, Boca Raton, Fla.

JANUARY

12-17 Society of Cryosurgery Annual Meeting, Hilton Plaza, Miami Beach, Fla.

15-16 Cleveland Clinic Educational Foundation Postgraduate Course, "Surgical Problems of the Liver, Biliary System, Pancreas and Spleen," Cleveland, Ohio

20-21 Cleveland Clinic Educational Foundation Postgraduate Course, "Cardiovascular and Renal Clinical Pharmacology," Cleveland, Ohio

20-Feb. 28 Six-Week Seminar, "Educational Science for Medical Teachers," Division of Regional Medical Programs, Dept. of HEW, University of Illinois College of Medicine, Chicago, Ill.

SEND IN MEETING INFORMATION

Many medical organizations are setting dates for their winter and spring meetings. At the same time they are choosing the topics to be discussed, arranging for speakers and planning programs.

The Continuing Medical Education office of the Kentucky Medical Association would like to urge these societies and organizations to notify this office of these dates and topics so they can be added to the "Continuing Education Opportunities" calendar in *The Journal*. In this way conflicts in dates can be avoided and a wider audience can be informed of these upcoming meetings.

Please send such information, when available, to the KMA Continuing Medical Education Office, 3532 Janet Avenue, Louisville, Ky. 40205.

A once-popular treatment for back pains was to have the seventh son of a seventh son stand or walk on the patient's back.





The pain of earache was allegedly relieved by holding a hot roasted onion to the ear.

For headache, a sovereign remedy was to wear a snakeskin round one's head.



A realistic approach to pain relief



Empirin'®

Compound with Codeine Phosphate gr. 1/2 No. 3

Each tablet contains:
Codeine Phosphate gr. 1/2 (Warning—May be habit forming), Phenacetin gr. 2 1/2, Aspirin gr. 3 1/2, Caffeine gr. 1/2.

keeps the promise of pain relief

B.W. & Co.' narcotic products are lass "B", and as such are available on oral escription, where State law permits.

BURROUGHS WELLCOME & CO. (U.S.A.) INC.
Tuckahoe, N.Y.

Muscle in Spasm



and Valium (diazepam)

The ability of Valium to help relieve skeletal muscle spasm—as well as psychic tension—demonstrates its clinical value and versatility.

The muscle-relaxant effect obtained with Valium, used adjunctively with other drugs or physiotherapy, favorably affects the entire cluster of spasm-related symptoms . . . helps accelerate return to normal activity.

When skeletal muscle spasm and psychic tension coexist, the calming effect of Valium is an added therapeutic benefit that contributes to the total management of the patient.

Before prescribing, please consult complete product information, a summary of which follows:

Indications: Tension and anxiety states; somatic complaints which are concomitants of emotional factors; psychoneurotic states manifested by tension, anxiety, apprehension, fatigue, depressive symptoms or agitation; acute agitation, tremor, delirium tremens and hallucinosis due to acute alcohol withdrawal; adjunctively in skeletal muscle spasm due to reflex spasm to local pathology, spasticity caused by upper motor neuron disorders, athetosis, stiff-man syndrome, convulsive disorders (not for sole therapy).

Contraindicated: Known hypersensitivity to the drug. Children under 6 months of age. Acute narrow angle glaucoma.

Warnings: Not of value in psychotic patients. Caution against hazardous occupations requiring complete mental alertness. When used adjunctively in convulsive disorders, possibility of increase in frequency and/or severity of grand mal seizures may require increased dosage of standard anticonvulsant medication; abrupt withdrawal may be associated with temporary increase in frequency and/or severity of seizures. Advise against simultaneous ingestion of alcohol and other CNS depressants. Withdrawal symptoms have occurred following abrupt discontinuance. Keep addiction-prone individuals under careful surveillance because of their predisposition to habituation and dependence. In pregnancy, lactation or women of childbearing age, weigh potential benefit against possible hazard.

Precautions: If combined with other psychotropics or anticonvulsants, consider carefully pharmacology of agents employed. Usual precautions indicated in patients severely depressed, or with latent depression, or with suicidal tendencies. Observe usual precautions in impaired renal or hepatic function. Limit dosage to smallest effective amount in elderly and debilitated to preclude ataxia or oversedation.

Side Effects: Drowsiness, confusion, diplopia, hypotension, changes in libido, nausea, fatigue, depression, dysarthria, jaundice, skin rash, ataxia, constipation, headache, incontinence, changes in salivation, slurred speech, tremor, vertigo, urinary retention, blurred vision. Paradoxical reactions such as acute hyperexcited states, anxiety, hallucinations, increased muscle spasticity, insomnia, rage, sleep disturbances, stimulation, have been reported; should these occur, discontinue drug. Isolated reports of neutropenia, jaundice; periodic blood counts and liver function tests advisable during long-term therapy.

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Precautions: In suspected staphylococcal infections, perform proper laboratory studies including sensitivity tests. If overgrowth of nonsusceptible organisms occurs (constant observation is essential), discontinue penicillin and take appropriate measures. Whenever allergic reactions occur, withdraw penicillin unless condition being treated is considered life threatening and amenable only to penicillin. Penicillin may delay or prevent appearance of primary syphilitic lesions. Gonorrhea patients suspected of concurrent syphilis should be tested serologically for at least 3 months. When lesions of primary syphilis are suspected, dark-field examination should precede use of penicillin. Treat beta-hemolytic streptococcal infections with full therapeutic dosage for at least 10 days to prevent rheumatic fever or glomerulonephritis. In staphylococcal infections, perform surgery as indicated.
Adverse Reactions: (Penicillin has significant index of sensitization): Skin rashes, ranging from maculopapular eruptions to exfoliative dermatitis; urticaria; serum sickness-like reactions, including chills, fever, edema, arthralgia and prostration. Severe and often fatal anaphylaxis has been reported (see "Warnings").
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CASE 7-67. This 26-year-old, married, white gravida 5, para 2, ab 2, had an uncomplicated pregnancy under the supervision of a private physician. She was Rh positive and the VDRL was nonreactive. Her expected delivery date was May 17, 1967, and labor began spontaneously on that day.

On admission at 1:20 a.m. on May 17, 1967, her blood pressure was 180/110 and she complained of severe headache. The fetal heart beat was of good quality in the left lower quadrant and was counted at 140/minute. She received 100 mg of Demerol 15 minutes before delivery, and had local anesthesia plus nitrous oxide for spontaneous delivery of a six pound, two ounce male infant who cried spontaneously at 1:45 a.m. She was in the hospital about 30 minutes before she delivered.

After delivery she still complained of the headache, and also of substernal pain. She was given 10 cc of 50 percent magnesium sulfate intramuscularly. A consultant was called and his examination report described a somewhat disoriented patient whose blood pressure was 220/140, pulse 120, respirations 20, and temperature 99°. The pupils were round and equal, and responded to light and accommodation. Funduscopic examination showed clear discs with no arteriolar spasm. The lungs were clear, and the heart showed a regular sinus rhythm. The impression was acute toxemia of pregnancy. An electrocardiogram was obtained and was normal.

The patient received 20 mg of Apresoline intramuscularly at 2 a.m., together with 100 mg Hydrodiuril orally, and Sodium luminal gr i, repeated in 30 minutes. Her blood pressure was checked every 15 minutes. A Foley catheter was inserted in the bladder and the output checked at 5 a.m.; by then, 350 cc of bloody urine had been collected. During the next hour, 50 cc more were collected. Her blood pressure ranged around 160/110, pulse 88; however, she continued to complain of a severe headache. She received 10 mg of Apresoline intramuscularly again at 5:45, 6:35 and 7:45 a.m. In spite of the therapy she convulsed at 8 a.m. for approximately two minutes. She received 1/8 gr. Morphine at 8:45 a.m., 10 mg Apresoline again at 9:10 and Serpasil 1 mg at 10:20.

She was given oxygen by mask and had a urine output of about 20 cc per hour, but her condition was described as extremely poor when she was transferred by ambulance to another hospital at 2 p.m. Her blood pressure at this time was 210/118. Her total serum uric acid was 12 mg%. She had 4+ albuminuria on admission, and 15-20 RBC.

She was admitted to the intensive care unit of the second hospital where an artificial kidney was available for use if her condition improved. She was given oxygen, Dilantin, 100 mg intravenously every six hours or as necessary to control seizures, and large doses of Solu-cortef, Ringers lactate, and intravenous fluids. After the results of the venous pH were obtained, an intravenous bicarbonate infusion was given.

Laboratory data included the following: hemoglobin 14.2 gm, hematocrit 43, WBC 18,200 with a marked shift to the left. The urine appeared black with specific gravity 1.004, and pH 5, 2+ protein, 40-50 red blood cells per high power field. The blood urea nitrogen was 26mg%. Electrolytes were within normal limits except for a carbon dioxide of 13.0 mEq/L. Total bilirubin was 17.7 mg%, 6.1 direct. Fibrinogen was 260 mg%. Prothrombin time was 24.4/12.2 seconds. The indirect and direct Coombs test were negative.

She had another grand mal seizure at 8:30 p.m. and again at 9:15 p.m., followed by a more severe and longer seizure at 10:30 p.m. Following this the pupils were dilated and fixed, and the patient was pronounced dead.

There was no autopsy.

Comments

The Committee classified this as a direct obstetric death with preventable factors on the part of the physician. The Committee commented that the treatment of the convulsive toxemia consisted of virtually homeopathic doses of the medications chosen, and that transfer of the patient to another hospital during the acute convulsive phase was possibly ill-advised, as these patients do not tolerate such stimuli well. Toxemia continues to represent an important cause of maternal death, and the principles involved in its management should be well understood by all physicians who treat toxemia patients.



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Careful observation of all patients is recommended. The antidepressant activity may be evident within 3 or 4 days or may take as long as 30 days to develop adequately, and lack of response sometimes occurs. Response to medication will vary according to severity as well as type of depression present. Elderly patients and adolescents can often be managed on lower dosage levels.

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Contraindication: Penicillin hypersensitivity.

Warnings: In rare instances, penicillin may cause acute anaphylaxis which may prove fatal unless promptly controlled. This type of reaction appears more frequently in patients with a history of sensitivity reactions to penicillin or with bronchial asthma or other allergies. Resuscitative drugs should be readily available. These include epinephrine and pressor drugs (as well as oxygen for inhalation) for immediate allergic manifestations and antihistamines and corticosteroids for delayed effects.

Precautions: Use cautiously, if at all, in a patient with a strongly positive history of allergy.

In prolonged therapy with penicillin, and particularly with high parenteral dosage schedules, frequent evaluation of the renal and hematopoietic systems is recommended.

In suspected staphylococcus infections, proper laboratory studies (including sensitivity tests) should be performed.

The use of penicillin may be associated with the overgrowth of penicillin-insensitive organisms. In such cases, discontinue administration and take appropriate measures.

Adverse Reactions: Although serious allergic reactions are much less common with oral penicillin than with intramuscular forms, manifestations of penicillin allergy may occur.

Penicillin is a substance of low toxicity, but it possesses a significant index of sensitization. The following hypersensitivity reactions have been reported: skin rashes ranging from maculopapular eruptions to exfoliative dermatitis; urticaria; and reactions resembling serum sickness, including chills, fever, edema, arthralgia, and prostration. Severe and often fatal anaphylaxis has occurred (see Warnings). Hemolytic anemia, leukopenia, thrombocytopenia, and nephropathy are rarely observed side-effects and are usually associated with high parenteral dosage.

Administration and Dosage: Usual dosage range, 125 mg. (200,000 units) three times a day to 500 mg. (800,000 units) every four hours. For infants, 50 mg. per Kg. per day divided into three doses.

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Ampicillin-Induced Rash in Infectious Mononucleosis

William R. Gabbert, M.D. and Anne H. Hopwood, M.D.

Owensboro, Kentucky

The remarkably high incidence of a severe characteristic hypersensitivity rash in cases of infectious mononucleosis treated with ampicillin makes the use of ampicillin contra-indicated in this disease.

IN SPITE of the viral etiology of infectious mononucleosis, antibiotic therapy has commonly been employed in this disease. Such treatment has seemed justified on an empirical basis pending establishment of a certain diagnosis; on the basis that alpha and beta hemolytic streptococci have been cultured from the throats of infectious mononucleosis patients; or in the hope that such treatment might somehow shorten the course of the illness.

A remarkable phenomenon being reported is the appearance of an extremely severe, alarming and unpleasant skin eruption in many infectious mononucleosis patients who happen to receive ampicillin. The authors have encountered two such cases.

Case I

A 19-year-old white female was seen on 4/17/68 with sore throat and enlarged tender anterior cervical lymph nodes. She had just returned from a two-month tour of Italy, France and Germany. A "Monosticon" screening test for infectious mononucleosis was positive and a heterophile antibody titer of 1:448 was present which remained at this reading until 7/12/68 when lowered to 1:112. Atypical lymphocytes were present on blood smear. Ampicillin 250 mg. four times a day and vitamins were prescribed. The patient developed an urticarial eruption on 4/23/68. seven days after beginning ampicillin, and the drug was discontinued immediately. On 4/25/68, the eruption became purpuric and morbilliform, involved the entire body, and was extremely pruritic. (Figures 1 and 2) Temperature reached 105°F. orally. Alpha streptococci predominated in culture of a smear taken from white patch on pharyngeal mucous membrane. Treatment with methylprednisolone, diphenhydramine and trisulfapyramidine was administered. Symptoms improved progressively. The rash reached its maximum intensity on 4/28/68, subsiding gradually thereafter. By 5/4/68 only a faint blush remained.

Case II

A 12-year-old white female on a vacation trip became severely ill on 6/24/67 with chills, fever, headache, sore throat, swollen tonsils and glands. She had previously enjoyed good health except for convulsive seizures which had been incompletely controlled with any regimen. She was receiving mephobarbital (Mebaral), primidone (Mysoline) and diphenylhydantoin (Dilantin). She was examined by a physician in Chattanooga, Tenn., who made a diagnosis of infectious mononucleosis. A test for heterophile antibodies was said to be strongly positive. Upon her arrival at home on 6/27/67, her condi-



FIGURE 1



FIGURE 2

tion was considered compatible with infectious mononucleosis. A Wampole "Mono-test" was positive, and atypical lymphocytes were present on blood smear. The heterophile antibody titer was 1:1792 before and after absorbtion with horse kidney and 1:224 after absorbtion with beef cells. A throat culture yielded alpha-hemolytic streptococci. Pending the outcome of throat culture and other laboratory studies, the patient was started on oral ampicillin, 250 mg. three times a day. A total of 12 capsules was ordered. On 7/5/67, 11 days after the onset of her illness, and seven days after beginning ampicillin, she developed a severe, generalized morbilliform, maculopapular, pruritic eruption involving the entire body, including the palms and soles. A drug eruption was suspected, and diphenylhydantoin was blamed. Both this and primidone were discontinued. The patient was hospitalized and treated with prednisone. Methdilazine hydrochloride (Tacaryl hydrochloride) was prescribed for itching. The rash cleared gradually during the next two weeks. Mephobarbital and phenobarbital were used for anticonvulsant therapy, but the patient suffered four grand mal seizures during the period. After the rash had faded, methuximide (Celontin) was introduced to prevent convulsions successfully. In retrospect, it appears that this was a case of ampicillin-included rash in infectious mononucleosis.

Discussion

The high incidence of a peculiar and severe skin eruption in infectious mononucleosis patients who receive ampicillin was described by Patel[1], who found "a characteristic and pruritic skin rash" in 100% of 13 patients so treated. Pullen, Wright and Murdoch[2], reported the phenomenon in 18 of 19 patients (95%) and Brown and Kanwar[3] in 20 of 29 (69%). All of these authors observed that the use of other antibiotics was also accompanied by a higher incidence of rashes than that which occurred when no antibiotic was given. (Table I)

Patel's description of the ampicillin-associated rash applies to our cases:

> "The rash began as copper-colored macules and papules, mainly over the trunk, and spread subsequently to the face and upper and lower extremities. Most patients complained of itching on the second day and needed symptomatic treatment. On the third and fourth day, the rash became generalized, covered the entire body (including the palms and soles), was more confluent over exposed areas and exposure points, and was marked over extensor surfaces. At this stage, a faint macular rash was seen on palatal and buccal mucosa in some patients. Thus development of the rash was predictable from day to day."

Pullen et. al. postulate that the apparent increased tendency to hypersensitivity reactions

TABLE I

AUTHOR	# PATIENTS INFECTIOUS MONONUCLEOSIS	ANTIBIOTIC GIVEN	% PATIENTS DEVELOPING RASH
Patel	11	None	9
	14	Other than Ampicillin	14
	13	Ampicillin	100
Pullen, et al	63	None	16
	102	Other than Ampicillin	35
	19	Ampicillin	95
Brown and Kanwar	24	None	13
	97	Other than Ampicillin	23
	29	Ampicillin	69

in infectious mononucleosis may be attributable to blood changes peculiar to this disease. These include the excess of lymphocytes, many of them atypical, and the presence of abnormal antibodies. Lymphocytes are known to be involved in immunity and hypersensitivity, and several different abnormal antibodies are known to appear during infectious mononucleosis.

The empirical use of antibiotics for infectious mononucleosis is due for reassessment. The point seems well taken that for all practical purposes the only acute non-viral throat infections which occur are due to penicillin-susceptible organisms, especially the beta-hemolytic streptococci. There should therefore be no indication for treating sore throats with ampicillin, whether or not the exact etiology is known. If infectious mononucleosis is diagnosed or suspected, ampicillin would appear to be contraindicated.

Summary

Two cases are reported of an alarming and severe rash with pyrexia occurring after administration of ampicillin to patients with infectious mononucleosis. Three reports are cited of a similar rash occurring in 69-100% of infectious mononucleoses patients others have treated with ampicillin, but with no fatalities to date[4]. It is concluded that ampicillin is contraindicated in infectious mononucleosis so that in patients with sore throats, it is imperative to exclude this eitology before instituting treatment.

References

1. Patel, B.M.: Skin rash with Infectious mononucleosis and ampicillin. *Pediatrics,* 40: 910-911, (Nov.) 1967.

2. Pullen, H., Wright, N., and Murdoch, J. McC.: Hypersensitivity reactions to antibacterial drugs in infectious mononuceosis. *Lancet,* 1176-1178, (Dec. 2) 1967.

3. Brown, G., and Kanwar, B.S.: Drug rashes in glandular fever. *Lance::* 1418 (Dec. 30) 1967.

4. E. G. Porter, M.D., Personal Communication

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The Use of Diphenylhydantoin Sodium (Dilantin®) In the Treatment of Cardiac Arrhythmias†

LENA CAPAPAS, M.D.*, MORRIS M. WEISS, M.D.** AND
LEONARD LEIGHT, M.D.***
Louisville, Kentucky

Experience with Diphenylhydantoin Sodium (Dilantin) in the treatment of cardiac arrhythmia with particular emphasis on indications and contraindications is presented.

DIPHENYLHYDANTOIN sodium (Dilantin®) is currently under investigation in many centers as an agent to treat cardiac arrhythmias. Initial enthusiasm for this drug has been tempered by recent studies which tend to limit its clinical effectiveness. It is the purpose of this paper to report data of our experience with diphenylhydantoin sodium (DPH) in the treatment of cardiac arrhythmias and assess its therapeutic value.

A brief historical resume of studies on the mode of action and early clinical experience will be given. A comprehensive review has not been written because recent reviews by Mercer and Osbourne[1], Sparburg[2], and Bray[3], have discussed in great detail mechanism of action, toxicity and clinical experience with DPH.

Materials and Methods

Thirty-three patients (16 males and 17 females), ranging in age from 24 to 86 years, with supraventricular and ventricular arrhythmias from a variety of causes were studied. The exact number of arrhythmic episodes treated could not be absolutely determined because seven cases received maintenance oral therapy for seven days or longer and were not continuously monitored. Three patients received DPH as out-patients only. All 30 hospitalized patients were admitted to the Jewish Hospital for cardiovascular illnesses. The majority of patients were treated in an intensive care unit. All hospitalized patients were observed with monitoring equipment. Three cases represent immediate post-operative arrhythmias. There were no cases of transient arrhythmias associated with induction of anesthesia, during cardiac catheterization and cardiac surgery or immediately following direct current cardioversion.

DPH was given in the diluent supplied by the manufacturer when administered intravenously. The oral and intravenous route were the commonest methods of administration; however, intramuscular and rectal means were utilized in a few cases. The intravenous dosage ranged from 150 mg. to 500 mg. but the majority of the patients received 250 mg. over a 2-5 minute period. The daily oral dosage varied from 300 mg. to 800 mg. in divided doses with a varying initial dose. The duration of administration ranged from a single dose to three months.

Results

Table 1 is a summary of the data on the use of DPH in the 33 cases studied.

Cases #1-6 represent the episodes of ventricular tachycardia. Cases #7-15 represent ventricular premature contractions most of which had a ventricular bigeminal rhythm throughout therapy or transiently before and during treatment. Cases #16-33 represent the episodes of supraventricular arrhythmias. These 18 cases consist of: atrial tachycardia (12 cases); atrial fibrillation (3 cases); atrial flutter (2 cases); atrial premature contractions (1 case).

Twenty-seven of the 33 patients were receiving digitalis at the time of therapy with

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***Co-Director, Cardiovascular Laboratory, Jewish Hospital and associate professor of medicine, University of Louisville School of Medicine

DPH. Two cases were thought to have digitalis intoxication.

Successful conversion of arrhythmias can be claimed in 11 of 33 cases (33%).

Only one of the six ventricular tachycardia cases converted to normal sinus rhythm and this reverted back in one hour. All were given DPH intravenously with a minimum dose of 250 mgs. These six cases were clinical emergencies and all were receiving digitalis at the time DPH was given.

Of the nine cases of ventricular premature contractions, four (44%) had excellent results which can be attributed to DPH alone. In one case there was rapid disappearance of the ventricular premature contractions but bigeminy recurred in 40 minutes which was unresponsive to DPH. In one case, quinidine sulfate, and in two cases, procaine amide, were given before the complete cessation of premature contractions effected by DPH so that the effective control of these three arrhythmias cannot be attributed to DPH alone. In only one case did DPH have no effect at all. Seventy-five percent of the digitalized patients with premature ventricular contractions who received DPH improved; but only 25% of the non-digitalized cases with premature ventricular contractions showed improvement.

DPH converted 28% (5 to 18) of the supraventricular arrhythmias. Eleven of the 12 cases of atrial tachycardia were receiving digitalis at the time of the arrhythmia. Three cases of atrial tachycardia occurred during an acute myocardial infarction and three in the immediate postoperative period after major surgical procedures (Cases #17-19). Eleven cases of atrial tachycardia were receiving digitalis when the arrhythmia occurred and three (27%) responded to intravenous DPH. However, one of the three recurred in a short period of time and failed to respond to another dose of DPH. One of two cases of atrial flutter converted to normal sinus rhythm. One case of atrial fibrillation failed to respond to a single intravenous dose of DPH. In the second case of atrial fibrillation it was used for two months post direct current cardioversion. Atrial fibrillation did not recur but an atrial bigeminal rhythm was recorded while on DPH.

In four cases of premature atrial contractions, two had complete cessation of the ectopic impulses, but of these one was on propanolol as well. One case had fewer atrial premature contractions and one had no response at all.

Discussion

Diphenylhydantoin sodium was studied as an anticonvulsant by Putnam and Merritt[4] in 1937 after evidence that conjugated phenols were responsible for the motor depression of uremia[5]. These same investigators introduced DPH in 1938 for the treatment of convulsive disorders after their initial laboratory trials[6]. By 1939 the actions of this drug on the cardiovascular system were apparent[7].

Harris[8] in 1948 showed that after sudden occlusion of a coronary artery, ectopic ventricular impulses arise from a narrow boundary zone of partially ischemic tissue. Comparing this finding with the knowledge that epileptogenic foci originate in the boundary zone in space occupying lesions of the brain, Harris and Kohernat[9] used DPH to control ventricular tachycardia in experimentally induced myocardial infarction in the dog. Subsequently a number of experimental studies showing the effect of DPH on supraventricular and ventricular arrhythmias were performed, with particular emphasis on digitalis induced arrhythmias[10-15].

The first reported clinical use of DPH as an antiarrhythmic agent was by Nadas et al in 1951[16]. They failed to convert a ventricular tachycardia in a 5½-year-old girl with a basal skull fracture. The patient did not have underlying heart disease. W. A. Leonard[17] in 1958 reported converting a procaine amide refractory ventricular tachycardia with intravenous DPH in a 42-year-old male with an acute myocardial infarction. These two papers have been followed by series of cases regarding the efficiency of DPH as an antiarrhythmic agent. These have been completely compiled and summarized by Mercer and Osbourne[1].

The mechanism of action of DPH as an antiarrhythmic agent is poorly understood. The three major pathways this drug might act through are:

1) Direct action on the myocardium.

2) Indirect effect through the central nervous system.

3) Anticholinergic effect.

DPH also acts as a coronary artery vasodilator. Although this action is probably unrelated to its antiarrhythmic properties it must be con-

(*Continued on page 975*)

*Legend, page 975

TABLE 1*

SUMMARY OF FINDINGS ON 33 CASES
TREATED WITH DIPHENYLHYDANTOIN SODIUM (DILANTIN(R))

Case	Age	Sex	Diagnosis	Arrhythmia	Dig	Dilantin in mg			Duration of Therapy	Results and Comments
						IV	IM	Oral		
1) O.M.	74	M	Acute Anterior Wall M.I.	Ventricular Premature Contractions	Yes			200 2 in 25 min		No effect. Lidocaine started intravenously.
				Ventricular tachycardia		250		300	1 dose	Converted after 1 min. but had recurrent VT in 1 hour converted with IV pronestyl. Frequent runs of V.T. with spontaneous conversion then intractable V.T. with death.
2) D.Y.	34	M	Acute inferior-lateral wall M.I.	Ventricular tachycardia Short runs of V.T.	Yes	250		1000 in 24H 800 o.d.		No effect. DC cardioversion done several times then lidocaine drip with recurrent short runs of V.T. Also received propanolol. Simultaneously receiving pronestyl in last 5 weeks of hospital stay with no recurrence.
3) M.S.	57	M	ASHD, CHF, Pulmonary Embolism	Recurrent V.T.	Yes	500		300 q 8H	Initial I.V. 2 oral doses	No effect. DC cardioversion successful.
4) B.E.	66	F	Acute inferior wall M.I.	Ventricular tachycardia	Yes	250			1 dose	No effect. DC cardioversion successful.
5) D.P.	56	M	Acute anterior wall M.I. Superimposed on old Infarction.	Ventricular tachycardia	Yes	250			1 dose	No effect. Recurrent intractable VT even with DC cardioversion, followed by death.
6) L.F.	84	F	Acute Anteroseptal M.I. AF, CHF	Auricular Fibrillation VPC's with runs of VT+ ventricular fibrillation	Yes	250			2 doses	No effect. VT recurrent even after several DC cardioversions.
7) M.R.	65	F	ASHD. Angina Pectoris	Ventricular bigeminy & trigeminy	No			300 initially then 100 QID		After initial dose, less frequent VPC's then complete cessation till discharge after 5 days in hospital. Kept on drug for three months with no recurrence of VPC's even after drug was discontinued but had occasional PAC's.
8) S.M.	55	M	Acute Anterior wall M.I.	Frequent VPCs.	No			300 initially then 100 q 6H	2 doses	No effect. After 7 hours quinidine was started at the same time.

						Dilantin in mg			Duration of Therapy	
						IV	IM	Oral		
10)	N.B.	75	F	ASHD with Pulmonary edema	Ventricular bigeminy	Yes	250	100 QID	12 days	Rare VPC's for 7½ hours then recurrence of ventricular bigeminy. Disappearance of VPCs
11)	T.S.	78	F	ASHD, Auricular fibrillation, CHF ? Digitalis Intoxication	Ventricular bigeminy	Yes	250	200 q 6H	12 H	Disappearance of ventricular bigeminy, rare VPCs
12)	L.O.	50	M	Chronic Subdural Hematoma Biparietal craniotomy	Ventricular bigeminy & trigeminy	No	100 q 6H			No effect initially.
							250		1 dose	Disappearance of bigeminy & trigeminy, only occasional VPCs disappeared next day.
13)	M.S.	50	F	Hypertensive C-V Disease Hypertensive Encephalopathy Pulmonary edema terminally	Ventricular bigeminy	Yes	150		Stat. doses	Disappearance of bigeminy but recurred in 40 minutes.
					Recurrent bigeminy		200			No effect. Developed an AV nodal rhythm with bigeminy converted by lidocaine.
14)	M.P.	48	M	Acute myocardial infarction	VPCs with bigeminy	No		100 QID		VPC stopped but pronestyl 250mg. Q.i.D. simultaneously started.
15)	H.M.	71	M	Old myocardial infarction	VPCs Ventricular bigeminy	No		100 QID	20 days	No effect.
16)	C.E.	72	F	Labile Hypertension	Paroxysmal atrial tachycardia	No		100 QID	1 week	Effect not evaluated because drug was discontinued after 1 week due to itching which stopped after drug was stopped.
17)	D.R.	77	F	Cholecystitis, Hiatus Hernia, Post Op Partial Small Bowel Obstruction.	Atrial tachycardia then nodal tachycardia with interference dissociation	Yes	250		1 dose	NSR followed by SA arrest with nodal escape then NSR with intermittent nodal tachycardia with interference dissociation.
					Recurrent PAT		250		1 dose	No effect.
18)	W.M.	47	M	Interatrial septal defect, (Post-operative) (closure IASD)	Atrial tachycardia	Yes	350		1 dose	No effect.
19)	J.C.	21	M	Aortic insufficiency, Ascending aortic aneurysm (Pathology-Idiopathic medial-necrosis of the ascending aorta)	Atrial tachycardia with runs of ventricular bigeminy	Yes	250		1 dose	No effect.
20)	B.B.	41	M	Old inferior wall M.I., Pulmonary edema.	Atrial tachycardia	Yes	250		2 doses	No effect.

Cose	Age	Sex	Diognosis	Arrhythmia	Dig	Dilantin in mg			Durotion of Theropy	Results and Comments
						IV	IM	Orol		
21) N.G.	86	M	Old onteroseptal woll M.I., Acute Pulmonory edema ? Digitolis Intoxication	Atriol tochycordia	Yes	250			1 dose	No effect.
22) O.C.	48	M	WPW, Possible ontero-septal inforction.	Atriol tochycardia	Yes	250			1 dose	No effect. Wos an orol mointenonce Dilantin 400 mgs. d. during recurrence and wos given 100 mgs. by privote physicion before odmission with no effect.
23) R.C.	56	F	Old inferior wall M.I. Acute subendocardiol infarction	Atrial tochycardia	Yes			200 mg. q 6H	2 doys	Converted with no recurrence.
24) A.M.	57	F	Acute anterior woll M.I. + proboble old inferior woll M.I.	Atrial tachycardia	Yes	250		200 q 8H		Conversion in 1 minute without recurrence.
25) L.N.	67	M	Acute ontero-septol woll M.I. Diverticulitis Anemia	Atriol tachycordio PVCs PACs	Yes	400	Rectol	600	1 day	Acute tochycardia converted by DC shock. No premature controctions ofter DPH wos storted but propanolol was given insteod of Dilantin after 24 H.
26) L.M.	59	M	Old inferior woll M.I. CHF	Atriol tochycordia	Yes			200 q 6H		Went into otrial tochycordio while on Dilantin.
27) M.S.	60	F	Poroxysmol atrial tachycordia	Paroxysmol atriol tachycardia	Yes			100 QID	2 weeks	Failed to prevent tochycordia so pronestyl wos used.
28) M.B.	63	F	ASHD, CHF Paroxysmol otriol fibrillation	Poroxysmol atriol fibrillation	Yes	250			1 dose	No effect.
29) E.Z.	68	F	ASHD, Old inferior woll M.I., CHF Acute subendocordiol injury.	Atrial fibrillotion	Yes	250			1 dose	No effect.
30) L.S.	69	F	ASHD	Poroxysmol otrial fibrillotion. PACs	Yes			100 TID	2 months	Hod DC cordioversion for poroxysmol otriol fibrillotion ofter which DPH wos storted. Hod atriol bigeminy while on the drug but no further fibrillotion.
31) M.M.		F	ASHD + CHF.	Frequent PACs	Yes	250		300 daily	9½ wks.	Return to NSR with frequent PACs.
32) B.P.	53	F	ASHD + CHF.	Paroxysmol atriol flutter.	Yes	250			1 dose	No effect. DC cordioversion successful.
33) M.R.	56	F	RHD with MS + CHF	Atrial flutter with varyino	Yes	250		100 q 4H	12 h.	NSR with few VPCs, next day developed

Legend For Table I

A.F.—Atrial Fibrillation
ASHD—arteriosclerotic heart disease
CHF—Congestive heart failure
d.—daily
DC—direct current
Dig.—Digitalis
H.—Hour
IASD—interatrial septal defect
IM—intramuscular
IV—intravenous
M.I.—Myocardial infarction
M.S.—Mitral stenosis
NSR—normal sinus rhythm
PAC—premature atrial contraction
PAT—paroxysmal atrial tachycardia
Q.I.D.—Four times a day
T.I.D.—Three times a day
VPC—ventricular premature contraction
VT—ventricular tachycardia
WPW—Wolff-Parkinson-White Syndrome

(*Continued from page 971*)

sidered as having a possible role until proven otherwise. Osbourne and Mercer[1] in their recent review have discussed in depth these properties of DPH. It seems superfluous to repeat this work at this time.

Summary and Conclusions

The role of DPH in the treatment of cardiac arrhythmias is slowly being defined. Our results are in general agreement with recent reported series. Thirty-three cases were studied. Successful conversion of the arrhythmias can be claimed in 11 (33%).

Patients who develop arrhythmias while receiving digitalis appear to respond more favorably. Atrial tachycardia (27%) and ventricular premature contractions (75%) were best effected.

Few serious side effects are noted during the acute intravenous administration of the drug if simple precautions are taken. This feature makes DPH quite desirable to give and easy to use. Therefore the large series of reported cases include arrhythmias during induction of anesthesia, during cardiac catheterization and cardiac surgery, or immediately following direct current cardioversion. These arrhythmias are often transient and usually of little clinical significance. We feel it is very difficult to assess the effect of DPH in these situations, and caution must be used in the interpretation of results. In addition, the value of maintenance oral therapy with DPH as a prophylactic agent to prevent recurrences of arrhythmias is still in doubt.

Bibliography

1. Mercer, E.N., Osbourne, J.A.: The Current States of Diphenylhydantoin in Heart Disease. *Annals of Internal Medicine 67:* 1084, 1967.

2. Sparberg, M.: Diagnostically Confusing Complications of Diphenylhydantoin Therapy: A review. *Ann. Int. Med. 59:* 914, 1963.

3. Bray, P. F.: Diphenylhydantoin (Dilantin(R)) After 20 years. *Pediatrics* 23: 151, 1959.

4. Putnam, T. J., Merritt, H.H.: Experimental determination of the anticonvulsant properties of phenyl derivatives. *Science.* 85: 525, 1937.

5. Harrison, R.T., Mason, M.F., Resnik, H.: Observations on the mechanism of muscular twitchings in uremia. *J. Clin. Invest.* 15: 463, 1936.

6. Merritt, H.H., Putnam, T.J.: Sodium diphenylhydantoinate in convulsive disorders. *J. Am. Med. Asso.* 111: 1067, 1938.

7. Williams, D.: Treatment of epilepsy with sodium diphenylhydantoinate. *Lancet* 2: 678, 1939.

8. Harris, A.S.: Terminal electrocardiographic patterns in experimental anoxia, coronary occlusion and hemorrhagic shock. *Am. Heart J.* 35: 895, 1948.

9. Harris, A. S., Kokernot, R.H.: Effects of phenylhydantoin sodium and phenobarbital upon ectopic ventricular tachycardia in acute myocardial infarction. *Am. J. Physiol.* 136: 505, 1950.

10. Mosey, L., Tyler, M.D.: Effect of diphenylhydantoin sodium, procaine hydrochloride, procaine amide hydrochloride and quinidine hydrochloride upon ouabaine-induced ventricular tachycardia in unanesthetized dogs. *Circulation.* 10: 65, 1954.

11. Lang, T. W., Bernstein, H., Barbieri, F. *et al:* Digitalis toxicity, treatment with diphenylhydantoin sodium. *Arch. Int. Med.* 116: 573, 1965.

12. Bose, B. C., Saifi, A.Q. & Sharma, S.K.: Studies on anticonvulsant and antifibrillatory drugs. *Arch. Int. Pharmacodynamics.* 146: 106, 1963.

13. Lang, T.W., Bazika, V., Pappelbaum, S., *et al.*: Autotransplanted heart-lung in cerebral venous shunt preparations: two new techniques for pharmacologic assay of cardiovascular drugs. *Am. J. Cardiol.* 16: 695, 1965.

14. Scherf, D., Blumenfeld, S., Taner, D., Yildiz, M.: The effect of DPHN (Dilantin) sodium on atrial flutter and fibrillation provoked by focal application of aconitine and delphinine. *Am. Heart J.* 60: 936, 1960.

15. Helfant, R.H., Scherlag, B.J., Damato, A.N.: Protection from digitalis toxicity with the prophylactic use of DPHN sodium. *Circulation.* 36: 118, 1967.

16. Nadas, A.S., Alimurung, M.M., Linenthal, A.J.: Persistent ventricular pacemaker following basal skull fracture. *Amer. Heart J.* 42: 888, 1951.

17. Leonard, W. A. Jr.: The use of diphenylhydantoin sodium in the treatment of ventricular tachycardia. *Arch. Int. Med.* 101: 714, 1958.

Diagnosis and Treatment of Spontaneous Pneumothorax In Patients Aged 40 and Over†

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Spontaneous pneumothorax in the aged is more prevalent now than 10 years ago. An aggressive approach—thoracostomy tubes and/or open thoracotomies—quickly restores normal respiratory conditions.

SPONTANEOUS pneumothorax in the aged is more prevalent now than 10 years ago. Responsible causes are a growing geriatric population and an increasing incidence of pulmonary emphysema.

Our series of 52 patients, 42 men and 10 women, aged 40 and over includes 22 patients in the fifth decade of life, 16 in the sixth decade, six in the seventh, four in the eighth and four in the ninth decade representing 66 separate episodes of spontaneous pneumothorax. Chronic bronchitis and pulmonary emphysema were the most frequently associated chronic pulmonary diseases with pulmonary emphysema being present in 42 patients or 80 percent.

All patients aged 40 and over have definite and more severe symptoms (due to associated lung disease in the older aged group) than younger patients having spontaneous pneumothorax. Most patients were pursuing normal activities at the time of onset. The most common incorrect diagnosis is myocardial infarction.

Pneumothorax may be difficult to detect by physical examination. In the emphysematous patient, the physician could confuse decreased breath sounds, hyperresonance and decreased tactile fremitus of the pneumothorax with the same characteristic findings of the advanced emphysematous chest; therefore, diagnosis should be confirmed by chest x-ray in every patient. Chest x-ray showed significant emphysematous blebs or bullae, often multiple and bilateral, in 27 or 50.9 percent of the 52 patients. Expiratory and inspiratory films help delineate small pneumothoraces; the expiratory film shows greater collapse. Serial chest x-rays are essential to patient management.

Although many well substantiated current medical reports support a more aggressive approach to treatment, the old conservative method of bedrest persists. Ultimately, the lung does re-expand but better results can be obtained by other methods in less time. As high as an 80 percent rate of recurrence has been reported for patients treated primarily by bedrest. Bedrest as a primary treatment for spontaneous pneumothorax does not serve the patient's best interest.

We advocate treatment directed at closure of the air leak with rapid and complete re-expansion of the lung consistent with the lowest rate of recurrence. Needle aspiration may be a life saver for a newborn in respiratory distress due to pneumothorax; however, it is only a temporizing measure and often leads to false security. Pneumothorax will recur if an air leak persists. More air must be removed from the pleural space than enters through the bronchial fistula of the collapsed lung if the dire consequences of a full blown tension pneumothorax are to be avoided. Needle aspiration does not meet this requirement nor do small bore catheters. We believe that every patient being considered for needle aspiration should have tube thoracostomy.

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**Senior author*

Time involved in the two procedures is essentially the same, patient discomfort only slightly more with introduction of a tube and both procedures can be performed in the emergency room, intensive care unit or the patient's room. Tubes can be passed with the trocar into the pleural space and connected to underwater drainage and suction in less than 15 minutes.

We use thoracostomy tubes as the initial treatment of the first uncomplicated pneumothorax with more than 10 percent lung collapse. Tubes, size #28 French or larger caliber, are inserted into the pleural space through the second anterior interspace at the mid clavicular line. The tube is connected to underwater drainage and suction maintained at a negative pressure of 15 to 25 cm. of water. Occasionally, an additional intercostal tube must be inserted to remove blood or to empty a large isolated air pocket. Prompt lung expansion eliminates the danger of tension pneumothorax. Suction is maintained 24 to 48 hours and underwater seal drainage continued an additional 24 hours. Tubes usually are removed in three to five days, but only when we are sure of complete lung expansion and closure of the air leak.

Patient ambulation begins the first day of hospitalization and continues daily thereafter. The presence of an intercostal tube with underwater drainage bottle and suction is ample reason for the patient to get up and out of bed rather than an excuse to stay in bed. Tube thoracostomy has proved to be safe and effective with a relatively low recurrence rate. Patients so treated usually return to their normal work habits in seven to 10 days.

Surgical treatment by open thoracotomy was advised and performed for 26 patients. Indications for open thoracotomy:

1. Recurrent pneumothoraces
2. Tube failure, i.e., continued air leak and incomplete expansion with tube thoracostomy after five days.
3. Massive hemopneumothorax
4. Pneumothorax with x-ray evidence of blebs and bullae
5. Chronic pneumothorax with trapped lung
6. One or more episodes of bilateral spontaneous pneumothorax

Operations—Open Thoracotomy

We make a standard posterolateral thoracotomy incision. Pleural blebs and bullae are found in the apical and posterior lung segments. String-like apico-posterior adhesions may prevent complete lung collapse thereby maintaining patency of air leaks. Blebs and bullae are excised with minimal sacrifice of functioning lung. Although excision is the preferable means of treating the bullae, multiple bullae may necessitate over-sewing of the base of the bullae. Simple wedge resection usually is adequate. Parietal and visceral pleural surfaces are vigorously rubbed with dry gauze. Two intercostal catheter tubes are left in the chest and connected to controllable underwater suction maintained between 15 and 25 cm. of water and continued until x-ray confirms complete lung expansion and no residual air leaks.

Rapid lung expansion is the rule. We have had no persistent residual pleural space problems. Pleural abrasion by dry gauze has been completely effective in promoting pleural symphysis. Pleurectomy is equally effective but unnecessary. Postoperatively, we never "allow our patients out of bed". We get them out of bed the day of operation and each succeeding day. There were no recurrences. Of 26 patients treated by open thoracotomy, 14 were in their 40's, six in their 50's, two in their 60's, three in their 70's and one aged 81. One death occurred.

Discussion

Due to associated and often extensive emphysema and fibrosis, air leaks tend to persist. Tube failure has been more frequent in the elderly patients thus requiring repeat tube thoracostomies or open thoracotomy. Open thoracotomy should not be delayed on the premise that pulmonary reserve is markedly reduced; it is reduced and will not improve unless definitive control with closure of air leaks by excision of pleural blebs and/or bullae with pleural symphysis is accomplished. Pulmonary reserve can only be helped by rapid lung expansion. The more severe the lung disease, the more urgent the need for lung expansion. Elderly people, in particular, tolerate open thoracotomy and lung expansion very well; they do not tolerate lung collapse and attendant complications.

(Continued on page 1008)

Encopresis in Childhood

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The importance of a combined pediatric and psychiatric approach to encopresis is a necessity. If both proceed simultaneously, most cases may be treated by the family physician or pediatrician with good results.

THE term encopresis was first coined by Weissenberg in 1926, and is defined as a repeated, involuntary passage of stool into the clothes without the presence of any organic cause to explain the symptom. It occurs in the child after he may be expected to establish adequate bowel habits, ordinarily at two years of age. Encopresis denotes uncontrolled defecation that is of an emotional origin. Uncontrolled defecation of an organic etiology is usually referred to simply as fecal soiling[1]. It is imperative for the physician to establish which of the two types of fecal incontinence he is dealing with before adequate therapy can be instituted. There are times when an organic cause may have been present initially with a subsequent emotional conflict arising. The purpose of this paper is to acquaint those physicians who deal with children, with the necessity of a combined pediatric and psychiatric approach for the effective treatment of encopresis. Neither one, without the other, will give the desired results.

A basic requirement of human social living is the ability of the individual to control his anal sphincter to regulate his defecation in a socially acceptable manner. The control of defecation is one of the earliest acts of social self-control which parents teach their children. The inability to learn such control, or its later breakdown, creates marked social and interpersonal problems. In children encopresis may be due to a variety of emotional stresses. The degree of emotional stress may not be severe and the child's adjustment may be sound in most areas of his life. On the other hand, there may be severe emotional problems[1]. The children with encopresis who eventually are taken to child guidance clinics tend to have severe emotional problems. As a result, the reports from child guidance clinics often reflect the view that encopresis is a serious symptom in children and responds to treatment with great difficulty. The reports from pediatric clinics or from psychiatric teams working in pediatric hospital settings, incline toward the view that encopresis is a symptom which may be associated with a wide variety of emotional stresses and need not indicate a severe, or deeply rooted, emotional problem in the child. This difference reflects the fact that usually only the more difficult cases reach the child guidance clinics.

Incidence

The incidence of encopresis has probably increased, but the figures in the literature are confusing. There was certainly a marked increase in Europe during and after World War II in all countries except Switzerland. Studies in the United States vary according to whether child guidance clinics or pediatric clinics are reporting. In 1963, a study in *Ped'atric Psychiatry* stated the incidence of encopresis to be 1.5 percent in 1000 consecutive cases referred from pediatric clinics to child guidance clinics[12]. Hale Shirley at Harriet Lane Home in Baltimore found that 3 percent of all children referred to that clinic had encopresis with a boy-girl ratio of 5:1.[2]

Etiology

Encopresis often arises out of a hostile mother-child battle over toilet training. Toilet training is one of the earliest areas in which the parent begins to make demands upon the child for socially acceptable behavior. During the second year the child begins to realize that something is happening, that something is passing from him. It is a further stage in the differentiation of himself from all the things

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around him because he becomes aware that a pleasant sensation occurs as he moves his bowels, and then secondarily aware that he is losing something in the process. This aspect of pleasure which the child demonstrates occasionally is very upsetting and a matter of great concern to some parents. When reared in a moral tradition which equates the stool with dirt, the parent may be bothered by the obvious pleasure that the child takes in passing his stool, in withholding it, in playing with it or in smearing it. If the parent has been emotionally cold and rejecting toward the child, the child may begin to fight back, expressing resentment by refusing to comply with the parent's expectations in toilet training. The child may find encopresis a symptom which infuriates the parent and through which he unconsciously expresses resentment and hostility toward the parent. The reciprocal hostilities of parents and child over the problems of toilet training may become entrenched, laying the foundation for prolonged, encopretic problems[3].

A general regression in behavior following the birth of a sibling may lead to encopresis. When the child feels himself displaced in the parents' affection by the birth of another child, he may compete for their attention by regressing to an infantile level of behavior which demands more activity of the parents with him. Such encopresis usually lasts a few weeks to a few months, and can be handled by careful parental attention to the needs of the child for reassurance about his place in the family affection. The child's role in the family may be defined as that of a beloved and valued assistant to the parent in caring for the newborn child, rather than a hostile competitor of the young baby. Parents should not underestimate the importance and usefulness of talking with children in this manner[14].

Other emotional stresses that may lie behind encopresis are a lack of parental love, insecurities in the mother-child relationship, and reaction to a threat in the environment. It may occur when the child's need for affection and security are gravely threatened; it may occur when dissolution of the family by divorce or other disruption is threatened. Encopresis may result from a complete lack of toilet training in the home. It also may follow simple and obvious mechanical difficulties such as fissures, prolapse of the rectum or excoriations from the rectum[5]. It has been shown that difficulty over toilet training may lead to rectal accumulation with resulting impaction. There is then an overflow or leakage which causes the repeated fecal soiling. This is the most important factor in children with constipation and encopresis[7].

Anthony divides children with encopresis into three categories: continuous, discontinuous and retentive. He describes the continuous child "as a dirty child coming from a dirty family," burdened with every conceivable sort of social problem. The child's messiness forms an integral part of the general messiness and is, to some extent, camouflaged by it. Symptom tolerance in these families is surprisingly high and the parents are usually driven to the clinic, reluctantly and resentfully, by social agencies. Mother's general attitude is one of "I couldn't care less." She can give very little data on training history and is frequently unable to recall which of the children in her large family soil and wet. The fact that this type of encopresis is most commonly found among the lowest of the social classes would suggest the operation of some cultural factors along with the evident psychopathology. In contrast, the discontinuous encopretic is the compulsive child of a compulsive family. He is over-controlled and inhibited in his emotional life and scrupulous with regard to his habits. The mothers tend to be rigid and authoritarian in their outlook, and to establish sado-masochistic relationships with their children and their husbands. The retentive encopretic child belongs to a subgrouping of both these categories. He has usually had strict toilet training, to which he responds by constipation and later encopresis[6].

Richmond describes the personality of encopretics as usually obedient and conforming. They control manifestations of hostility and aggressiveness, except for their soiling, and favorably impress adults. They are often stoical about their symptoms, treating it as an unfortunate handicap and hiding their anxiety and depression about it with the same intensity as they hide other emotional reactions. There are infrequent displays of overt emotion[13].

Diagnosis

As one would gather from the prior discussion of etiology of encopresis, a careful and

detailed history is imperative. Physical examination of the encopretic child usually reveals no significant abnormality except for a commonly found fecal impaction. However, one should inspect the rectum closely for presence of fissures, prolapse of the rectum, fistulas or excoriations that may cause painful defecation. Painful defecation may cause retention of feces with resulting impaction. There is then seen commonly the overflow or leakage of feces around the hard bolus of feces in the rectum with resulting fecal incontinence. In any physical examination of the child, a rectal examination should be a regular part of the child's examination. Protoscopy can be done simply in the office with use of a strong test tube lubricated with jelly. As the tube is slowly inserted into the rectum, the mucosa can be visualized with the aid of the light from an otoscope. As the finger is inserted into the rectum, the examiner will commonly encounter a large fecal bolus and dilated bowel immediately after passing through the sphincter. This is in contrast to the true aganglionic megacolon in which one finds an empty rectum. Also in Hirchsprungs Disease, there is a lack of the desire to defecate. Barium enema may be required to help eliminate organic causes of fecal incontinence.

A Case

The following case is fairly representative of 10 encopretic children seen in consultation at Children's Hospital and the Metropolitan Social Service Department (Foster home children at Children's Center and residents of Ormsby Village) from January 1967 to January 1968.

Paul was a nine-year-old white male youngster who was admitted to Children's Hospital because of fecal incontinence for a two-year duration. His physical examination was normal except for the presence of a large fecal impaction. A barium enema revealed a dilated colon with feces. Protoscopy was performed after removal of the impaction and was normal. Child psychiatric consultation was requested. It was learned that soiling had intermittently been present since the mother had vigorously attempted to toilet train her son with coercion. She began toilet training at one year of age and would tie the child to his potty chair for long periods of time. This was accompanied with physical punishment. During this time the mother was having marital conflict with her alcoholic husband and undergoing severe emotional stress. The father deserted the family consisting of the patient, one year of age, and two older sisters, six and nine years of age.

The mother described herself as a compulsive personality with an obsession for cleanliness. She never allowed the children to become dirty and had been extremely overprotective of her children, especially her son. She would rush to his defense immediately if she anticipated a playmate fighting. She would walk her son to and from school which was three blocks away from their home.

Paul was described as unusually obedient and conforming. He was neat in all spheres except for the encopresis. He was described as a straight "A" student who was the favorite of his teachers. However, he related poorly to his own peer group. He was said to enjoy going to church and all of the church's activities. He joined his church at four years of age at his mother's insistence. He craved affection and cried often if his ways were not met.

Paul stated that his goal in life was to be a doctor or a minister. When asked what three things he wished more for, he answered: "(1) to be a good boy for the rest of my life, (2) to be able to buy Bibles and pass them out to everyone, and (3) to be able to control my bowels." It was learned that from an early age, he was ashamed of his fecal soiling and would frequently hide his underclothes in an attempt to conceal the encopresis.

The mother was an anxious, fearful, insecure woman who frequently would frantically seek advice from her parents. Paul had been subjected to many home remedies, laxatives, enemas, erratic changes in his diet, since his mother was preoccupied obsessively with his bowel functioning. She reacted to the encopresis with great alarm, frequent crying spells and emotional outbursts. The most recent remedy initiated by the grandparents was a prayer meeting with the neighbors in hope of curing Paul's encropresis.

One could see a deep unconscious conflict between the mother and the child. The mother seemed incapable of expressing a genuine warmth toward the child. There was underlying resentment, hostility and a fear of rejection and abandonment. Resentment in the

mother was related to a past rejection, most probably by her husband, while the hostility in the child was related to a more anticipated rejection (primary hostility). The mother is attempting to control and keep her son in infancy for fear that he may someday leave her. The child is reacting to this attempt by his encopresis. He does not dare consciously express his anger and hostility for fear that his mother may abandon him. This conflict between mother and child has deep foundations.

Treatment

The earliest description in the literature of fecal incontinence due to possible emotional origin was in 1881 by Edward Henoch in Berlin. He described a case of an eight-year-old boy whom he treated for fecal incontinence with a subcutaneous injection of ergotamine close to the rectum. The therapeutic result led him to suspect that the symptom was psychogenic in origin. He treated his subsequent cases with injections of distilled water, "and as a suggestive measure, gave a couple of strong blows with the hands to the perianal tracts." There are other reports of the sadistic use of a branding iron and electrical shocks to the rectum. These methods, thankfully, have long since disappeared[12].

The treatment of the encopretic child requires both a pediatric and a psychiatric approach. The pediatric treatment is aimed at establishing regular and easy bowel movement without discomfort. There are several methods that the physician can employ, either separately or in combinations:

1. The Davidson Method is divided into three phases. Phase I requires the initial clearing up of existing fecal impactions with hypertonic phosphate enemas. They are administered in pairs by the mother. Because of their dehydrating effect, a pair of enemas should not be administered more often than morning and evening of the same day. Usually no child will require more than four pairs of enemas to remove the impaction. The child is then given increasing amounts of mineral oil until the dose is large enough to result in a regular easy soft bowel movement. Phase II stresses the need to begin the establishment of a pattern of regular bowel movements without reliance on drugs and to overcome stool holding. Usually the quantity of mineral oil can be reduced in six to eight weeks. Phase III includes repeated evaluation and follow-up without use of laxatives[9]. The danger of prolonged use of mineral oil must be considered. This includes influence on metabolism of the oil-soluble vitamins[10].

2. Local anesthetic ointments and creams should be applied to fissures and local irritations that might cause painful evacuations.

3. The use of suppositories in this author's experience has replaced the use of enemas. There are several excellent types available. One, the pediatric vacuett, is an effervescent suppository that liberates carbon dioxide and stimulates rectal evacuation. This may be helpful in establishing regular bowel movements without need of enemas or laxatives.

4. Stool softeners are required for easy natural passage.

5. Bulk producers such as meteshylcellulose may be added to the treatment regimen.

6. Stimulant cathartics may be used safely over a three-month period in gradually decreasing quantities. The aromatic fluid of extract of cascara is equally effective and inexpensive[11].

The psychiatric approach is carried out simultaneously with the medical approach. The most useful initial step is a careful explanation of the problem to the mother. The physician should carefully explain that no physical disease is present, if it is not. He should explain that the problem arises out of emotional tensions and interpersonal problems of the child. It must be emphasized that punishment, threats and other such maneuvers will not be useful in getting rid of this symptom, but will complicate the situation. The parents should be told that the encopresis is not a willful disobedience of the child, but rather a symptom arising out of emotional stresses. In a more general way, these things can be explained to the child. A child of four or five years of age can be told that his difficulties are due to the troubles in his life and to the worries and problems that arise out of his relationships with other people. A flexible type of counselling with parents and children is used. Some brief inquiry should be made into the relationship of the parents with the child, and appropriate

mental hygiene counselling should be given. If marital dissension in the home is upsetting the child, the parents may be advised that whatever they can do to correct the difficulties of their marriage may contribute to the disappearance of their child's encopresis. One may examine the possible relationship of the encopresis to the birth of a recent sibling, to disruptions in family life which threaten the child's security and affection, or to the degeneration of the toilet training process into a hostile battleground between mother and child. Whatever is emotionally unhealthy in the home should be pointed out. Many cases of encopresis will respond to this type of counselling. The cases that will respond occur in those situations where the family interpersonal relationships are sound, and where difficulties of a limited nature have led to the development of the encopresis[1].

As one ascends the scale of severity in emotional disturbance, treatment becomes more difficult and referral to appropriate child guidance, psychiatric, or child psychiatric sources is indicated. With the deeper conflicts, the child and the mother must recognize and be able to express their attitudes freely without guilt. The mother frequently will express violent and hostile reactions toward the child in therapy, something she dared not do before[4]. Play therapy is one of the most important tools in the treatment of the child, as it allows the development of a relationship with the therapist. Also as a child plays, he is able to act out situations that cause emotional stress at home. Hostility that the child cannot openly express may become apparent toward a sibling or toward the parent. Modeling in clay is an excellent way to get the child to express himself. In the older child, art therapy may be useful in helping the child express his feelings. It is especially useful in the encopretic who is depressed, constricted and apprehensive. The child is encouraged to talk about his work, identify figures and tell stories about the pictures. This enables him to express himself and work out his conflicts.

Summary

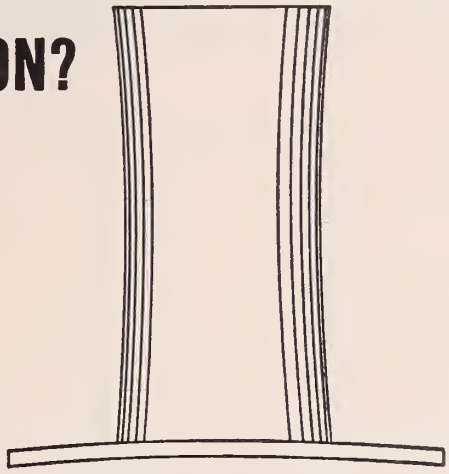
The various topics of definition, incidence, etiology, discussion, and treatment of encopresis with a review of the literature have been presented. Emphasis was placed on the importance of combined pediatric and psychiatric therapy to proceed simultaneously. This combined approach has not been stressed in the past. Minor cases may be treated with good results by the pediatrician or the family physician. The more complicated cases require the aid of a child psychiatrist. A case of encopresis in a nine-year-old boy was presented and discussed.

References

1. Chapman, A.H.: Encopresis in childhood. *Medical Times.* 90:1-6, Jan. 1962.
2. Shirley, H.F.: Encopresis in children. *J. Pediat.* 12:367, 1938.
3. Work, H.H., Call, J.D.: *A Guide to Preventive Child Psychiatry.* McGraw-Hill Book Company, 1965, P. 81.
4. Warson, S.R., Caldwell, M.R., Warriner, A., Kirk, A.J. and Jensen, R.A.: The Dynamics of encopresis. *Am J. Orthopsychiat.* 24:402, 1954.
5. MacNamara, M.: Notes on a case of lifelong encopresis. *Brit J. Med. Psychol.* 38:333, 1965.
6. Anthony, E.J.: An experimental approach to the psychopathology of childhood encopresis. *Brit, J. Med. Psychol.* 30: 157, 1957.
7. Kemptom, J.: Constipation and encopresis, a pediatricians view. *Psychosomatic aspects of Pediatrics.* London: Pergamen Press. 1961.
8. Shirkey, H.S.: Bowel evacuation in infancy and childhood, *Nebraska Med. J.* 50: 67-70. Feb. 1965.
9. Davidson, M., Kugler, M.D., and Bauer, C.H.: Diagnosis and management in children with severe and protracted constipation and obstipation. *J. Ped.* 62:261-275 (Feb) 1963.
10. Morgan, J.W.: The harmful effects of mineral oil (liquid petrolatum) purgatives. *J.A.M.A.* 117: 1335. 1941.
11. Downing, J.E. and Shirkey, J.C.: Home treatment, *Pediatric Therapy.* St. Louis, The C.V. Mosby Company, 1964. p. 163.
12. Bellman, M.: Encopresis. *Acta Paed. Scand.* 168-70:1-138 1966 Supplement.
13. Richmond, J.B., Eddy, E.F. and Garrard, S.D.: The syndrome of Fecal Soiling and Megacolon. *American Journal of Orthopsychiatry* 24:391-402. 1954.
14. Lehman, E.: Psychogenic incontinence of feces. *Am. J. Dis. Child.* 68:190, 1944.

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SPECIAL ARTICLES

Presidential Address †

GEORGE F. BROCKMAN, M.D.*

ALMOST six-score years ago our forefathers established this Kentucky Medical Association for: . . . "The cultivation, diffusion, interchange, preservation and general circulation of medical knowledge throughout the state". In thinking of this responsibility, Doctor William L. Sutton, in the first presidential address, set a proper standard of modesty for his successors: "I do not presume that I shall say anything which is not perfectly familiar to every gentleman here, nor say it any better than anyone here would say it, but, for mutual improvement: As iron sharpeneth iron, let every man sharpen the face of his neighbor."

Today I propose to review our efforts "to diffuse medical knowledge across the state," or, in the new terminology, continuing postgraduate medical education.

If this session is like those of recent years, physician registration will equal approximately 40 percent of our membership. We cannot cite that as conclusive evidence that all physicians in Kentucky are studying, because many of us are repeaters here year after year. We know that many of our colleagues seek education elsewhere—in the meetings of their specialty societies, informal postgraduate courses, or in hospital staff conferences, or other sources. Even, we know, there are some who learn best by reading and reflecting in the quiet shelter of their own study.

When we have accounted for all of the physicians who continue active in study, we are left with a sorry residue—the under-achieving physicians who make no effort to keep up. They are becoming one of our more serious problems. In former days, they were subject to a market discipline of sorts; if their performance was grossly inadequate, the public withdrew its custom, and they drifted into obscure corners where their ignorance occasioned little harm. In our affluent society, with medical care substantially underwritten for all, the patients have lost much of the option of discrimination; the overflow from the practice of the better physicians can keep these inadequate performers entirely too busy.

How serious is this problem? I do not know. We have no objective evidence as to either the amount or kind of postgraduate medical education that may be needed. The few studies reported in literature are neither objective nor conclusive. Doctor Woolsey of the Albany Mid-state Medical Center is now designing a scientific study of a sample population of 200 physicians as the first application of effective methodology in this field. These physicians agree to be tested to establish the baseline of their knowledge; to undergo exposure to various forms of education; and to be further retested for an appraisal of the effectiveness of various educational methods.

We might think that malpractice suits would provide some indication of the need for postgraduate medical education. Unfortunately, we have access only to cases that have gone to decision by courts of record. A review of these indicates that frank ignorance is comparatively unimportant in actions against physicians. Most awards result from forms of mischance or misadventure. The sponge left in the abdomen at operation is typical. No physician practicing today does not know that foreign bodies should not be left in the abdomen. No amount of postgraduate education can insure against whatever break is responsible for the offending sponge.

What has been our attitude on continuing postgraduate development by the physician? All of us who have graduated since the Flexner Reforms have had substantially the same experience. We were screened by Admission Committees, who did as well as men could to select neophytes with dedication, intellectual potential and a zeal for personal attainment. Our medical schools are intended as communities of scholars, doing as well as men can to instill the principles of observation and rational thought. And above all else, our teachers have endeavored, by precept and exhortation, to point us on the path of a perpetual quest for personal excellence.

We arrogate no virtues to ourselves in emphasizing this quest for personal excellence. In almost any calling, there are those who take pride in being at the top of their craft. And we, like those of other crafts, have relied on the individual continuing his development on an intuitive basis, seeking those additional facts and skills that mark the master craftsman.

Once the physician has demonstrated the ability to graduate, and secure license to practice, we have assumed that this quest for excellence would lead him to capable performance for the rest of his life. That this is substantially true is partly evidenced by

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†Presented at the KMA Annual Meeting Opening Session, September 24, 1968

**President, Kentucky Medical Association, 1967-68*

the fact that in the past year, 10,500 physicians paid hard cash for the use of a gruelling 10 hour self-examination prepared by the College of Physicians.

When the specialty boards developed, the medical school pattern was followed. Once a physician had demonstrated a given level of competence, it was thought that no further effort was needed to compel his further development. For gross misconduct a physician may lose his license, his membership in organized medicine, and his specialty college affiliation, but he will still retain his certification as the diplomate of his specialty board. There is no mechanism for lifting board certification. A partial justification is that in general, specialists work essentially in hospitals, where they are subject to other forms of discipline.

After World War II the Academy of General Practice became the first large group to establish standards of continual progress as a condition for membership. Standards of continued physician performance are specified for the proposed Board of Family Practice as recommended in the *Willard Report*.

Government, as a major purchaser of medical care, is expressing interest in the talents of the individual physician.

In Kentucky, we have experienced the unfortunate results of an unrealistic approach by the Title XIX Administration toward physician evaluation by administrative fiat.

Administratively, the Federal Government has endorsed standards for medical practice that have been publicly proclaimed as guaranteeing quality medical care in the hospital environment: mandatory "stop" orders for medication; mandatory progress notes; mandatory consultation. These are all rules adequate for the governance of faceless junior house officers, but are certainly no stimulus to excellence for even an average clinician.

In New York, the Health Department has asserted the authority for inspecting the office, facilities, personnel and records of physicians who care for MEDICAID patients. They further prescribe certain standards of postgraduate training which must be met by physicians. This is a bold assumption of relicensing authority by an agency which has no primary licensing authority.

Observe that these efforts, advanced in the guise of insuring the *quality* of health care, are actually concerned with government's more proper concern—the *quantity* (in dollars per patient served) of medical care. This is in direct opposition to our concern with the true quality of patient care.

Can we avoid an abrasive confrontation with government on this issue? I submit that we can.

Let us examine some of the problems.

The most popular proposal for insuring minimal continuing attainment by the practicing physician has been the requirement that he undertake some specified amount of postgraduate study. The Academy of General Practice requires 150 hours of approved instruction every three years for continued membership. This has the advantage of administrative convenience. It provides no guarantee that the physician was attentive during this exposure to advanced knowledge, and, most regretfully, it offers no assurance that this latest knowledge will ever be applied at the point of greatest need—the sick patient. Despite these defects, the American Medical Association has initiated a massive program for evaluation of postgraduate courses, and is contemplating the establishment of some form of certification for attendance.

The other popular proposal is periodic examination for relicensure for physicians. This bogs down badly when we begin to attempt to specify who will be examined by whom, and over what material. Must the distinguished middle-aged neurosurgeon be challenged on the role of Cis-aconitic acid in the anaerobic oxidation of carbohydrate, so that he can become the peer (at least in this respect) of the sophomore medical student? Does the opthalmologist really need to understand the counter-current concentration of sodium in the renal tubule to satisfactorily transplant a cornea?

Whose indications for the use of anti-coagulants are the revealed gospel that condemns all other practices as the teaching of false prophets?

What legal defense can a physician, who fails the re-examination, offer in any malpractice suit, however unmerited, by a dissatisfied former patient?

We have addressed ourselves so far primarily to the continued education of the practicing clinician. I am informed that our medical centers are not entirely without a version of this problem. I find it credible that in any large department in any medical center old enough to have tradition there is "Old Joe". He was the brightest and most promising resident of 20 years ago, but somehow the promise has never quite jelled. He has established tenure, he does no harm, but he adds little luster to the institution. Would a voluntary surveillance mechanism for handling "Old Joe" appeal to our academic colleagues? Should there be some better mechanism than the present plan for enticing the dean of the new school at San Cristi into stealing him?

How can we propose to assure ourselves, our colleagues, our patients and government of our continuing professional competence?

In several technical areas, government has recognized that its competence to exert authority is subject to a credibility gap—that in these areas government action is best mediated through voluntary consultative agencies. Examples include the American Standards Association, the National Academy of Science, the U.S. Pharmacopea Commission, and, of very present interest to us, the Joint Commission on Accreditation of Hospitals.

These agencies are voluntary, broadly-based, authoritative in specialized fields, and capable of rendering objective decisions. To them, citizens and government alike give credence, and their decisions are substantially accorded the effect of law.

Can we devise a commission for the accreditation of physicians? It would need to be, as the Joint Commission on Accreditation of Hospitals, outside the framework of organized medicine. It would need to be broadly based, to include educators and others, as well as both member and non-member physicians;

(*Continued on page 1012*)

EDITORIALS

The New President

ANOTHER year has passed for the Kentucky Medical Association and a new president has taken office. These are busy years for the members and officers of the Association and the time goes by quickly. Henry Asman, as the new president, brings to the office an unusual background of experience in the Association. He served as vice-president of KMA in 1961 and as its secretary from 1963 to 1967.

Doctor Asman is a native of Louisville, a graduate of Notre Dame and the University of Louisville School of Medicine. He has practiced proctology in Louisville since 1939 and is a member of numerous medical societies. He has been a consistent worker in the Jefferson County Medical Society over a period of many years.

A special article entitled "The Challenges We Face," by Doctor Asman, was in the October issue of The Journal. In it he indicates some of the special areas of concern for KMA during this new year. Some of these are as follows:

The creation of a permanent committee on Plans and Development; the recruitment of the some 300 physicians in Kentucky who are not members of KMA; the need for extensive involvement of KMA members in the Comprehensive Health Planning for the state; solutions to be found for the many problems Medicaid still presents; the problems of recruitment of persons for the health professions; the constant challenge of informing and keeping informed the Association members of the activities and areas of interest of KMA.

Doctor Asman has outlined an ambitious program for this new year for himself and for the Association. In Kentucky it is traditional to give serious consideration to past performances. In the instance of the new president of KMA, the past performance record would indicate that we can expect a very good year for the Association and that much will be accomplished.

WALTER S. COE, M.D.

Gastroscopy As a Diagnostic Aid

SINCE the introduction of the flexible gastroscope by Rudolph Schindler, M.D., 36 years ago, there has been an ever increasing effort to improve endoscopy of the stomach, esophagus, and more recently the duodenum. Interest in this method is indicated in one way by the increasing number of instruments and improvement of the technical approach. The Wolf-Schindler type of scope with its multiple prism transmission of light in a curved path was for the first 10 years the only one available. The original optical system has been improved and entirely new principles of light transmission found until there are now available 14 lens gastroscopes, 22 fibroscopes, and 13 gastrocameras. Advancement in method has been so rapid during the past 15 years that the physician doing endoscopic examination has had a difficult choice of methods.

With the smaller and more flexible scopes there has been much less danger of trauma to the mucosa or perforation of the wall. These accidents have been decreased also by more attention to the contraindications and a better selection of patients. Though the examinations

are carried out on a vastly wider scale and by a great many more physicians, unfavorable consequences are seldom reported.

By whatever method used, observation is still almost entirely limited to the stomach. It has been hoped that the fibroscope would bring endoscopic study of the duodenum into easy orbit, but few examiners have claimed ability to see beyond the pylorus with any regularity or great degree of satisfaction.

Use of the gastric camera has received the greatest impetus in recent years. Americans, French and Japanese especially have developed cameras for multiple exposure on 8 mm films which give pictures clear enough to be interpreted with considerable accuracy. These may be taken blindly or under direct observation of the examiner—very fascinating color moving pictures are also obtained. Whether the photographic film is superior to deliberate and detailed examination of the mucosa by direct vision remains debatable. It is better adapted to use in great numbers of subjects, gives opportunity for several examiners to see and discuss the significance of the findings, and provides a permanent record. It is undoubtedly the method of greatest use in the future.

Obtaining biopsy of the gastric mucosa under direct vision is more easily accomplished with the improved, more flexible instruments and leads to a better proof and understanding of gastritis and the positive diagnosis of malignant lesions. Cytological examination is also facilitated by this method. Detection of the source of bleeding by early gastroscopy is often better accomplished by direct vision than by barium study which for a long time has been regarded as too often unrewarding.

Gastric malignancy appears to be on the decline in the United States and some other areas, but is of increased incidence in Japan and other far eastern and Asian countries. Mass surveys for malignancy by x-ray study were undertaken briefly in some cities here several years ago but proved too cumbersome, expensive and unproductive of results. Mass surveys by endoscopic methods have recently been undertaken in Japan and promise much more practical and reliable results. The detection of very early malignancies is claimed and this is, of course, an objective which has been almost completely elusive for many years of effort.

X-ray with its constant improvement in methods and accuracy remains our chief reliance for gastrointestinal study, including the stomach. Gastroscopy has always been regarded as a supplementary adjunct and will continue to be so used, but it has been increasingly helpful and necessary. Improvement in instruments and techniques gives promise of its greater usefulness.

SAM A. OVERSTREET, M.D.

ORGANIZATION SECTION

House Chooses Dr. Cawood KMA President-Elect

Walter L. Cawood, M.D., Ashland, chairman of the KMA Board of Trustees during the 1967-68 Associational year, was named president-elect by the House of Delegates at its second session September 25.



Doctor Cawood

Doctor Cawood succeeds Henry B. Asman, M.D., Louisville, who was installed as president at the close of the session. Doctor Asman succeeds George F. Brockman, M.D., Greenville.

A 1946 graduate of the University of Louisville School of Medicine, Doctor Cawood interned in Nashville, then served with the Army Medical Corps from 1947 to 1949. He practiced in Harlan until 1955, before taking his residency training in radiology at Johns Hopkins Hospital. He has since practiced in Ashland where he has been active in the Boyd County Medical Society and in KMA.

Last year Doctor Cawood began his second term as KMA trustee for the Thirteenth District and was elected chairman of the Board, in which capacity he served until his election in September.

A Bylaw revision passed at the second session of the House changed the number of KMA vice-presidents from three to one. Edwin P. Solomon, Jr., M.D., Louisville, past president of the Jefferson County Medical Society, was elected to that office.

Richard F. Greathouse, M.D., Louisville, was elected to a second three-year term as speaker of the House of Delegates. Carl Cooper, Jr., M.D., Bedford, was re-elected vice-speaker of the House.

Elected AMA delegate for the term January 1, 1969, to December 31, 1970, was incumbent J. Thomas Giannini, M.D., Louisville. Incumbent Charles G. Bryant, M.D., Louisville, was elected AMA alternate delegate for the same term.

Nominating Committee Selected

The KMA House of Delegates chose the five members of the Nominating Committee, who will nominate the 1969-70 officers of the Association, during the final session September 25.

Members of the committee are David Hull, M.D., Lexington, Joseph Miller, M.D., Benton, Fred Rainey, M.D., Elizabethtown, J. Sankey Williams, M.D., Nicholasville, and William VonderHaar, M.D., Louisville. The chairman will be chosen at the committee's first meeting at the time of the Interim Meeting March 26 and 27 in Lexington.



Following his election by acclamation to the office of KMA president-elect, Walter L. Cawood, M.D., Ashland (right) watches George F. Brockman, M.D., Greenville, outgoing president, attach the president-elect ribbon to his badge. George A. Sehlinger, M.D., Louisville, vice chairman of the Board of Trustees, supervises the activity.

Board Names Dr. Hess Chairman Dr. Sehlinger Vice Chairman

Beginning the third year of his first term as trustee for the Eighth District, Lee C. Hess, M.D., Florence, was elected chairman of the KMA Board of Trustees at its September 26 meeting. Doctor Hess succeeds Walter L. Cawood, M.D., Ashland, new KMA president-elect.

George A. Sehlinger, M.D., Louisville, was named vice-chairman of the Board at the same meeting. Doctor Sehlinger is also beginning the third-year of a first term as trustee for the Fifth District.

A general practitioner, Doctor Hess is a 1956 graduate of the University of Louisville School of Medicine. He is a member of the Kentucky and American Academies of General Practice, an associate member of the Cincinnati Academy of Medi-



Doctor Hess



Doctor Sehlinger

cine and former treasurer of the Boone County Medical Society.

Doctor Sehlinger, a urologist, has practiced in Louisville since 1948. He is a 1940 graduate of the University of Louisville School of Medicine, a diplomate of the American Board of Urology and a fellow of the American College of Surgeons.

Ballard W. Cassady, M.D., Pikeville, was elected by the House to a second term as trustee for the Fourteenth District. Paul E. Holbrook, M.D., Ashland, was selected to fill the unexpired term of Doctor Cawood for the Thirteenth District.

Trustees elected to their first terms on the Board are C. C. Lowry, M.D., Murray, First District; Thornton E Bryan, Jr., M.D., Cadiz, Third District; W. Bruce Hamilton, M.D., Shepherdsville, Fourth District; and Robert N. McLeod, Jr., M.D., Somerset, Twelfth District.

The KMA House approved a Bylaw change under which alternate trustees were selected for each of the 15 trustee districts. The new alternate trustees are listed below.

District	Alternate Trustee
First	Carroll W. Traylor, M.D., Calvert City
Second	Kenneth M. Eblen, M.D., Henderson
Third	Frederick A. Scott, M.D., Madisonville
Fourth	Emmett W. Wood, M.D., Bardstown
Fifth	W. Fielding Rubel, M.D., Louisville
Sixth	James O. Willoughby, M.D., Bowling Green
Seventh	Thomas P. Leonard, M.D., Frankfort
Eighth	Donald K. Dudderar, M.D., Newport
Ninth	James L. Ferrell, M.D., Paris
Tenth	Irving F. Kanner, M.D., Lexington
Eleventh	Hugh Mahaffey, M.D., Richmond
Twelfth	Paul J. Sides, M.D., Lancaster
Thirteenth	Arthur B. Richards, M.D., Louisa
Fourteenth	James A. Holbrook, M.D., Prestonsburg
Fifteenth	Harold L. Bushey, M.D., Barbourville



Performing his first official duty as the new KMA president, Henry B. Asman, M.D., Louisville, (left) presents to George F. Brockman, M.D., Greenville, outgoing president, a plaque in appreciation for his year of service to the Association. The presentation was made at the close of the second session of the House September 25.



Exchanging congratulations on their new offices in KMA at the close of the second session of the House are President Henry B. Asman, M.D., Louisville, (left) and President-elect Walter L. Cawood, M.D., Ashland, former chairman of the Board of Trustees.

Annual KEMPAC Seminar Hosts Ky. Senatorial Candidates

The Sixth Annual KEMPAC Seminar September 23, which drew a record attendance of 235 physicians and their wives, featured talks by Kentucky's two candidates for U.S. senator and a member of the AMPAC Board.

Miss Katherine Peden, Democratic candidate from Hopkinsville, and Judge Marlow Cook, Republican candidate from Louisville, expressed their views on numerous local and national issues, with particular emphasis on those topics of special interest to the medical profession.

Mrs. Ethel Gastineau, Indianapolis, Ind., a member of the AMPAC Board, encouraged the KEMPAC members to take an active part in politics, stressing the importance of the woman's role in this area.

John C. Quertermous, M.D., Murray, chairman of the KEMPAC Board, presided at the Seminar which was held in the Flag Room of the Kentucky Hotel.

Auxiliary Elects Mrs. Gardner Installs Mrs. McBeath

The Woman's Auxiliary to the Kentucky Medical Association named Mrs. Hoyt D. Gardner, Louisville, president-elect and installed Mrs. William H. McBeath, Lexington, president during its Annual Convention September 23-25 in Louisville. Mrs. McBeath succeeds Mrs. Charles C. Kissinger, Henderson, 1967-68 president, who presided at the meeting.

Other officers elected at the convention include Mrs. David B. Stevens, Lexington, fourth vice-president; Mrs. John F. Berry, Jr., Lexington, corresponding secretary; and Mrs. J. Murray Kinsman, Louisville, parliamentarian.

Re-elected to office were Mrs. F. H. Hodges, Pikeville, first vice-president; Mrs. James A. Harris, Paducah, second vice-president; Mrs. O. J. Stein,

Somerset, third vice-president; Mrs. C. E. Hornaday, Owensboro, recording secretary; and Mrs. Bernard Schoo, Louisville, treasurer.

Other convention highlights included a luncheon address by Mrs. John M. Chenault, Decatur, Ala., president-elect of the AMA Auxiliary, and presentation of the Community Service Award to Mrs. Lon B. Rogers, Pikeville.

Lt. Governor Nigh's Talk Highlights Luncheon

The reason why Oklahoma's Lieutenant Governor George Nigh has earned the title of "The New Will Rogers" was evident to the more than 300 physicians, their wives and guests who attended the President's Luncheon September 25 at the Kentucky Hotel during the Annual Meeting.

Lt. Gov. Nigh delighted his captive audience by presenting in a unique oratorical style a series of highly amusing tales about his life in public office, particularly during the time he served as governor to fill an unexpired term, which he admitted was for "only nine days."

A liberal sprinkling of stories about Kentucky and local personalities included in Lt. Gov Nigh's talk added extra enjoyment for the audience and brought repeated roars of laughter and rounds of applause to the speaker.

Since the Woman's Auxiliary to KMA included the President's Luncheon in their official program for the first time this year, many physicians' wives had the opportunity to enjoy Lt. Gov. Nigh's presentation with their husbands.



Oklahoma's Lieutenant Governor George Nigh entertains physicians and their wives at the President's Luncheon with a series of highly entertaining observations on contemporary living and delights his audience with tales of his experiences in public office. His talk was entitled "It's A Fast, Fast World."

Drs. Lansing, Isbell Receive 1968 KMA Faculty Awards

Allan M. Lansing, M.D., Louisville, and Harris Isbell, M.D., Lexington, received the 1968 KMA Faculty Scientific Achievement awards at the President's Luncheon, September 25.

Established in 1962 by the Committee on Medical Education which serves as the selection committee, these awards are presented annually to a faculty member at each of Kentucky's two medical schools for outstanding research or other important contributions to the field of medicine.

Doctor Lansing, chief of cardiovascular surgery at the University of Louisville School of Medicine, initiated the first organ transplant in his community and has been instrumental in the development of a nationally recognized center for open cardiac surgery. His talents as a teacher and as a surgeon have been highly significant in the educational program at the University.

Doctor Isbell, who has served as acting chairman of the University of Kentucky Medical Center's department of medicine, has gained wide recognition for his achievements in the field of drug addiction research. He carries a heavy teaching load both in the department of medicine and the department of pharmacology where he has a joint appointment, and he serves as a consultant to a number of national health organizations.

KMA Top Awards Given To Drs. Fortune, Wathen

Carl H. Fortune, M.D., Lexington, and Charles A. Wathen, M.D., London, received the highest awards of the Kentucky Medical Association at the President's Luncheon September 25 during the Annual Meeting.

Recently retired from the Lexington Clinic where he practiced for 37 years, Doctor Fortune was honored with the Distinguished Service Medal as the most outstanding member of the Kentucky Medical Association.

Doctor Wathen, a 1928 graduate of the University of Louisville School of Medicine celebrating his 40th class reunion this year, was named the Outstanding General Practitioner in Kentucky. He has practiced in London since 1935.

KMA's third top award was given posthumously to Joseph P. Sanford, KMA executive secretary from 1951 to 1968. (See story opposite page.)

Doctor Fortune is a past president of the Kentucky Society of Internal Medicine and the Fayette County Medical Society, and has served as governor for Kentucky of the American College of Physicians since 1963.

Throughout his 40 years of practice in Jackson and Laurel Counties, Doctor Wathen traveled to all corners of his community, often on horseback over nearly impassable roads, to administer to the sick.

In 1967 he received the Friday Nighters Cup for outstanding service to his community and has been honored as an Outstanding Citizen by the London Junior Chamber of Commerce.

Mr. Sanford Honored by KMA At President's Luncheon

In two separate ceremonies at the 1968 President's Luncheon September 25, the Kentucky Medical Association honored the late Joseph P. Sanford, executive secretary from 1951 until his death in March of this year.

The R. Haynes Barr Award, given by KMA each year to a layman for outstanding service in the field of medicine, was presented posthumously to Mr. Sanford. Mrs. Sanford accepted the award from Richard F. Grise, M.D., Bowling Green, chairman of the Awards Committee.

In appreciation for his dedication to the betterment of medicine in Kentucky, the Association named the KMA Headquarters Office in Louisville the Joseph P. Sanford Memorial Building. KMA President George F. Brockman, M.D., Louisville, unveiled the bronze plaque to be placed in the building's lobby.



Recipients of KMA's top awards at the President's Luncheon pose with Richard F. Grise, M.D., Bowling Green, (right) Awards Committee chairman who made the presentations. Carl H. Fortune, M.D., Lexington, (left) received the Distinguished Service Award and Charles A. Wathen, M.D., London, was named the Outstanding General Practitioner.



At the President's Luncheon Mrs. Joseph P. Sanford, Louisville, accepts the R. Haynes Barr Award given posthumously to her husband in recognition for his contributions to Kentucky medicine during the years he served as KMA executive secretary. Richard F. Grise, M.D., Bowling Green, Awards Committee chairman, presents the award. In a separate ceremony at the luncheon, the KMA Headquarters Office was named the Joseph P. Sanford Memorial Building.



KEMPAC members join their guest speakers near the head table following the Annual KEMPAC Seminar September 23 at the Kentucky Hotel. Pictured from left to right are George F. Brockman, M.D., Greenville, KMA president; Miss Katherine Peden, Hopkinsville, Democratic candidate for U.S. senator; Fred C. Rainey, M.D., Elizabethtown, chairman for state affairs, Committee on Legislative Activities; Judge Marlow Cook, Louisville, Republican U.S. senatorial candidate; Mrs. Ethel Gastineau, Indianapolis, Ind., AMPAC Board member, and John C. Quertermous, M.D., Murray, chairman of the KEMPAC Board.



Kenneth M. Eblen, M.D., Henderson, chairman of Reference Committee #4, presents his report to the delegates at the second session of the KMA House September 25. Other physicians serving as reference committee chairmen were Thomas L. Heavern, M.D., Highland Heights; C. C. Lowry, M.D., Murray; David B. Stevens, M.D., Lexington; Walter Johnson, M.D., Paducah; and Robert L. McClendon, M.D., Louisville.



Newly elected KMA Vice President Edwin P. Solomon, Jr., M.D., Louisville, (second from left) joins other top officers of the Association at the close of the second session of the House. With Doctor Solomon, from left to right, are S. Randolph Scheen, M.D., Louisville, secretary; Henry B. Asman, M.D., Louisville, president; and Keith P. Smith, M.D., Corbin, treasurer.



Let's be specific about Campbell's Soups... and *reducing diets*



There are more than 30 million people in America who are overweight. During the next year, you probably will see more than 1,000 of them in your own practice.

One good way to help these patients is to give them a reducing diet based on ordinary eating patterns.

Campbell has prepared a sensible plan for weight control based on ordinary eating patterns. The plan consists of a patient instruction booklet and a set of menus which provide approximately 1,200 calories daily. The menus are balanced to provide the minimum daily requirements of nutrients.



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In childhood



Warnings: Lomotil should be used with caution in patients taking barbiturates and with caution, if not contraindicated, in patients with cirrhosis, advanced liver disease or impaired liver function.

Precautions: Lomotil is a Federally exempt narcotic with theoretically possible addictive potential at high dosage; this is not ordinarily a clinical problem. Use Lomotil with considerable caution in patients receiving addicting drugs. Recommended dosages should not be exceeded, and medication should be kept out of reach of children. Should accidental overdosage occur, signs may include severe respiratory depression, flushing, lethargy or coma, hypotonic reflexes, nystagmus, pinpoint pupil tachycardia; continuous observation is necessary.

Adverse Reactions: Side effects reported wit Lomotil therapy include nausea, sedation, dizzines vomiting, pruritus, restlessness, abdominal discon fort, headache, angioneurotic edema, giant urticari lethargy, anorexia, numbness of the extremitie atropine effects, swelling of the gums, euphori depression and malaise. Respiratory depression an coma may occur with overdosage.

Dosage: The recommended initial daily dosage given in divided doses until diarrhea is controlle are as follows:

diarrheas...



- careful supervision
- electrolyte replacement
- specific anti-infective therapy

and...

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TABLETS/LIQUID

Each tablet and each 5 cc. of liquid contains:
diphenoxylate hydrochloride ..... 2.5 mg.
(Warning: May be habit forming)
atropine sulfate .....0.025 mg.

LOMOTIL, in conjunction with specifically indicated medical management, may be lifesaving in children with severe diarrhea.

Lomotil lowers the excessive intestinal propulsion characteristic of diarrhea. This reduction of precipitate intestinal flow allows a normal or more nearly normal reabsorption of fluid and electrolytes and counteracts the dehydration so hazardous to children.

Moreover, eight years' experience has demonstrated that Lomotil controls diarrhea with a minimum of unwanted secondary actions.

Senra del Valle and his associates[1] conducted a study of 477 children with diarrhea, most of whom were hospitalized with the disorder. Lomotil, used in 407 of the children, shortened the duration of the diarrhea.

Grinszpan, Goldstein and Divito[2] used Lomotil in 20 children with diarrhea and also reported a prompt disappearance of diarrhea. Harris and Beveridge[3] in a double-blind study of 50 children with diarrhea, however, found no clear pattern to suggest that Lomotil influenced the course of the condition.

Michener, Brown and Turnbull[4] added evidence supporting the beneficial effects of Lomotil in 80 children, concluding that Lomotil was highly useful in controlling abdominal cramping, diarrhea and hypermotility.

Children: Total Daily Dosage

3-6 mo. . . . ½ tsp.* t.i.d. (3 mg.)
6-12 mo. . . ½ tsp. q.i.d. (4 mg.)
1-2 yr. . . . . ½ tsp. 5 times daily (5 mg.)
2-5 yr. . . . . 1 tsp. t.i.d. (6 mg.)
5-8 yr. . . . . 1 tsp. q.i.d. (8 mg.)
8-12 yr. . . . 1 tsp. 5 times daily (10 mg.)
Adults: . . . . 2 tsp. 5 times daily (20 mg.) or 2 tablets q.i.d.

*Based on 4 cc. per teaspoonful.

Maintenance dosage may be as low as one-fourth the initial daily dosage.

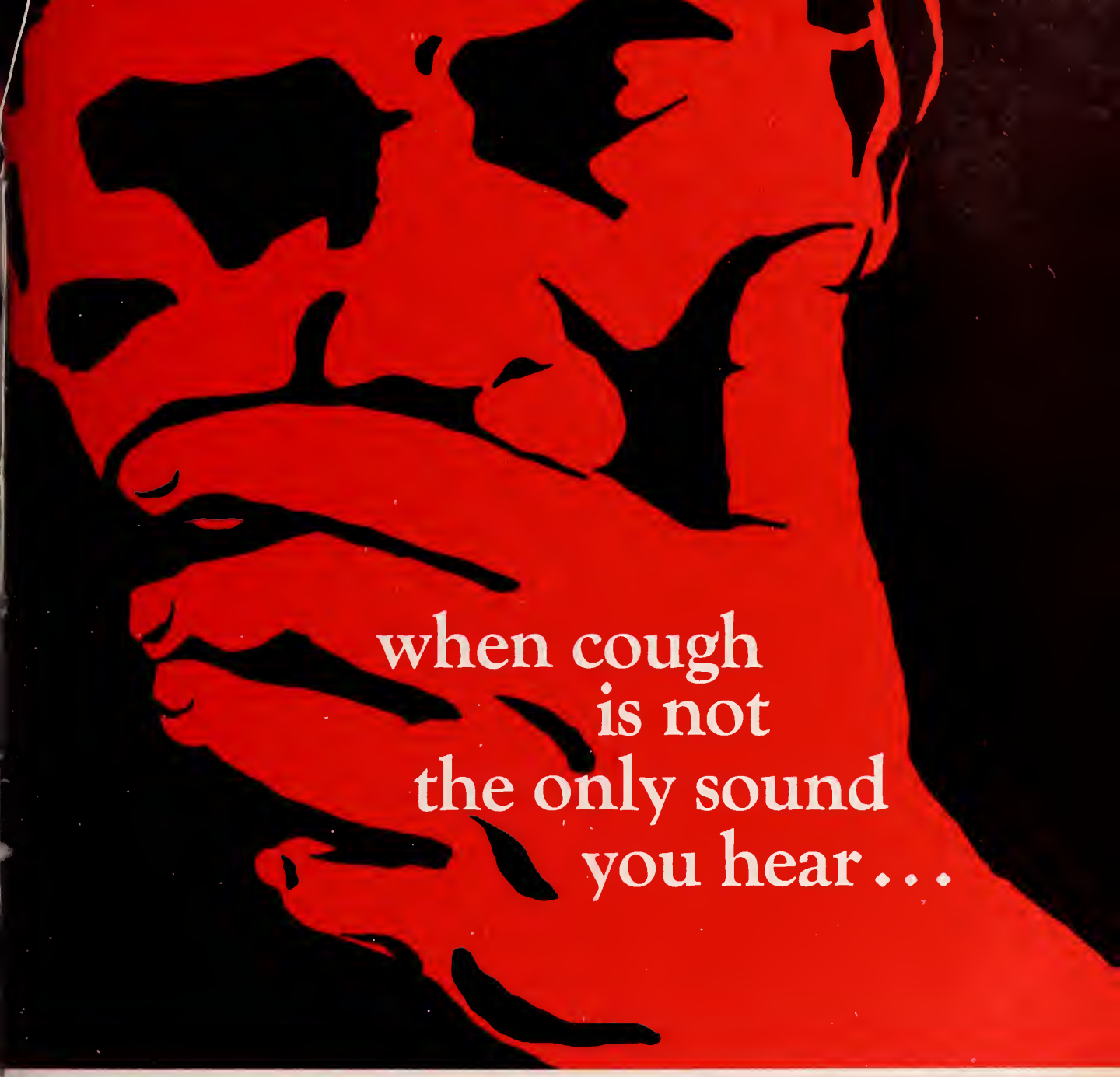
References:

1. Senra del Valle, A.; Linfante de Rufinelli, E. B.; Brumetti, E., and Rossi, R. H.: El chlorhidrato de difenoxilato en las diarreas infantiles, Sem. Med. (Buenos Aires) *127*:475-484 (Oct. 4) 1965. **2.** Grinszpan, I. L.; Goldstein, A., and Divito, J.: El chlorhidrato de difenoxilato en las diarreas infantiles, Sem. Med. (Buenos Aires) *125*:758-763 (Aug. 27) 1964. **3.** Harris, M. J., and Beveridge, J.: Diphenoxylate in the Treatment of Acute Gastro-Enteritis in Children, Med. J. Australia *2*:921-922 (Nov. 27) 1965. **4.** Michener, W. M.; Brown, C. H., and Turnbull, R. B., Jr.: Ulcerative Colitis in Children. II. Medical and Surgical Therapy, Amer. J. Dis. Child. *108*:236-242 (Sept.) 1964.

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The therapeutic usefulness of Omni-Tuss is enhanced by a unique resin complex formulation providing the clinically desirable advantages of: (1) uniform drug availability throughout an extended period, (2) 8 to 12 hours of symptomatic control, (3) minimal dosage requirement, (4) minimal side effects.

Economical, efficient **b.i.d.** dosage—extremely well-tolerated by children, 6-12, and adults.

'Omni Tuss' Suspension: Each teaspoonful (5 cc.) contains 10 mg. codeine (Warning: May be habit-forming), 5 mg. phenyltoloxamine, 3 mg. chlorpheniramine, 25 mg. ephedrine, all as cation exchange resin complexes of sulfonated polystyrene, and 20 mg. guaiacol carbonate.

Available on prescription only. Class X exempt narcotic. Permissible on oral prescription.

Dosage: *Adults:* 1 teaspoonful (5 cc.) q12h.
Children (6-12 *years*): ½ teaspoonful q12h.

Side Effects: Minimal, but when encountered may include jitteriness, nausea, drying of mouth, insomnia, constipation, which disappear upon adjustment of the dose or discontinuance of treatment.

Precautions and Contraindications: For complete detailed information, refer to package insert or official brochure.

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your patient can feel better while she's getting better

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Each tablet contains: ACHROMYCIN® Tetracycline HCl 125 mg.; Phenacetin 120 mg.; Caffeine 30 mg.; Salicylamide 150 mg.; Chlorothen citrate 25 mg.

In tetracycline-sensitive bacterial infection complicating respiratory allergy, ACHROCIDIN brings the treatment together in a single prescription—prompt relief of headache and congestion together with effective control of the organisms frequently responsible for complications leading to prolonged disability in the susceptible patient.

For children and elderly patients you may prefer caffeine-free ACHROCIDIN Syrup. Each 5 cc contains: ACHROMYCIN (Tetracycline) equivalent to Tetracycline HCl 125 mg.; Phenacetin 120 mg.; Salicylamide 150 mg.; Ascorbic Acid (C) 25 mg.; Pyrilamine Maleate 15 mg.

Contraindications: Hypersensitivity to any component.

Warning: In renal impairment, since liver toxicity is possible, lower doses are indicated; during prolonged therapy consider serum level determinations. Photodynamic reaction to sunlight may occur in hypersensitive persons. Photosensitive individuals should avoid exposure; discontinue treatment if skin discomfort occurs.

Precautions: Drowsiness, anorexia, slight gastric distress can occur. In excessive drowsiness, consider longer dosage intervals. Persons on full dosage should not operate vehicles. Nonsusceptible organisms may overgrow; treat superinfection appropriately. Treat beta-hemolytic streptococcal infections at least 10 days to help prevent rheumatic fever or acute glomerulonephritis. Tetracycline may form a stable calcium complex in bone-forming tissue and may cause dental staining during tooth development (last half of pregnancy, neonatal period, infancy, early childhood).

Adverse Reactions: *Gastrointestinal*—anorexia, nausea, vomiting, diarrhea, stomatitis, glossitis, enterocolitis, pruritus ani. *Skin*—maculopapular and erythematous rashes; exfoliative dermatitis; photosensitivity; onycholysis, nail discoloration. *Kidney*—dose-related rise in BUN. *Hypersensitivity* reactions—urticaria, angioneurotic edema, anaphylaxis. *Intracranial*—bulging fontanels in young infants. *Teeth*—yellow-brown staining; enamel hypoplasia. *Blood*—anemia, thrombocytopenic purpura, neutropenia, eosinophilia. *Liver*—cholestasis at high dosage.

Upon adverse reaction, stop medication and treat appropriately.

Lederle

927-8

KMA House Acts on 14 Resolutions, 44 Reports Covering Variety of Topics Including Comprehensive Health Planning, Legislative Activities

A total of 44 reports and 14 resolutions kept the members of the KMA House of Delegates busy between September 23 and 25 during the KMA Annual Meeting in Louisville.

Two of the resolution dealth with legislative activities, two others with osteopathic physicians, while the remainder ranged from such local subjects as home health care, Comprehensive Health Planning, and Educational Television to national matters relating to the AMA executive vice president and KMA participation in national meetings.

Reports and resolutions submitted to and acted on at the 1968 meeting of the KMA House of Delegates will appear in the December issue of the Journal It is only possible to touch on some of the highlights in this article.

A resolution from the Jefferson County Medical Society was approved instructing KMA to introduce a resolution into the AMA House of Delegates calling for a change in the bylaws that would require the executive vice president to be an active member of the AMA. A Fayette County resolution called for the KMA Executive Committee to study the scheduling of participants for national meetings so that a variety of trustees, delegates and/or officers can be involved.

Comprehensive Health Planning was an item of major interest at the 1968 House of Delegates sessions where it was recorded that "this is an important area worth the attention of each member". The House asked that each trustee be responsible for the immediate organization of a regional health planning council in his given area.

In the field of legislative activities, a Board of Trustees resolution was approved expressing appreciation to those who worked "so earnestly and unselfishly on behalf of good health legislation during the 1968 Kentucky General Assembly".

Another resolution called for physicians to become candidates for the Kentucky General Assembly and for other physicians to offer them active and meaningful support. The Board of Trustees was instructed to provide such administrative staff that two staff men be assigned full-time as lobbyists during the sessions of the General Assembly. Members of the Legislative Committee were commended for their excellent work.

The House of Delegates reaffirmed its policy on reimbursement on the usual and customary basis and urged Kentucky Physicians Mutual, Inc., to provide contracts to as many of its subscribers as possible on the usual and customary principle. To implement such a program, the House requested that a state-wide Claims Review Committee be established to review cases which could be referred to it by any third party and that KMA assist and encourage all county medical societies with 20 or more active practicing physicians in establishing a local claims review committee.

The House also reaffirmed KMA policy that usual and customary fees should be paid for all physician services, whether in or out of hospitals, and further, that these usual and customary fees should be reviewed no less frequently than on an annual basis.

In discussing the needs for increasing the supply of health manpower, the Health Careers Committee report was adopted, stating that KMA would support fully the efforts of the Kentucky Hospital Association which has initiated a "Health Careers in Kentucky" foundation. The House requested that KMA give financial support to this endeavor and referred the implementation of the report to the Board of Trustees.

A constitutional amendment was approved changing the number of KMA vice presidents from three to one, and another amendment directed that an alternate trustee be elected from each of KMA's 15 districts.

Bylaw changes included the addition of a new membership for service (armed forces) members, an increase in associate and inactive member dues from $8 to $10, and authorization for two or more adjacent component societies to combine into one multi-county component society.

In other actions, the House of Delegates accepted a resolution recommending the purchase of time from the Kentucky Educational Television Authority and the rental of material to present two hours of post-graduate education to be followed by a survey for evaluating this media. Kentucky physicians were asked to take an active part in school health and physical education, and by adoption of a Fayette County resolution, physicians were asked not to accept payment from so-called debt adjusters or credit arrangers which have recently begun extensive operations in the state.

Another Fayette County resolution pointed out that some insurance companies require considerably more paper work by not accepting the universal form and requested KMA committees to work with the appropriate departments of state government and with various insurance companies to modify the procedures to achieve a realistic program. In approving a Henderson County resolution, KMA was asked to formulate and help implement through county medical societies a program to encourage physicians to utilize home health services with local control.

Through other resolutions approved, the Board of Trustees was urged to request a report on the annual registration of physicians (Jefferson County); KMA policy was reaffirmed endorsing the idea of the necessity of physicians being voting members of hospital boards of trustees (McCracken County); and opthalmic solutions for the prevention and treatment of glaucoma were requested for addition to the Kentucky Medical Assistance Program drug list (Fayette County).



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Just one tablet at bedtime • Prevents painful night leg cramps • Permits restful sleep

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One tablet of QUINAMM at bedtime usually controls distressing night cramps and permits restful sleep with the initial dose.

Prescribing information—Composition: Each white, beveled, compressed tablet contains: Quinine sulfate, 260 mg., Aminophylline, 195 mg. **Indications:** For the prevention and treatment of nocturnal and recumbency leg muscle cramps, including those associated with arthritis, diabetes, varicose veins, thrombophlebitis, arteriosclerosis and static foot deformities. **Contraindications:** QUINAMM is contraindicated in pregnancy because of its quinine content. **Side Effects/Precautions:** Aminophylline may produce intestinal cramps in some instances, and quinine may produce symptoms of cinchonism, such as tinnitus, dizziness, and gastrointestinal disturbance. Discontinue use if ringing in the ears, deafness, skin rash, or visual disturbances occur. **Dosage:** One tablet upon retiring. Where necessary, dosage may be increased to one tablet following the evening meal and one tablet upon retiring. **Supplied:** Bottles of 100 and 500 tablets.

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Contraindications: Hypersensitivity to tetracycline.

Warning: In renal impairment, since liver toxicity is possible, lower doses are indicated; during prolonged therapy consider serum level determinations. Photodynamic reaction to sunlight may occur in hypersensitive persons. Photosensitive individuals should avoid exposure; discontinue treatment if skin discomfort occurs.

Precautions: Nonsusceptible organisms may overgrow; treat superinfection appropriately. Tetracycline may form a stable calcium complex in bone-forming tissue and may cause dental staining during tooth development (last half of pregnancy, neonatal period, infancy, early childhood).

Side Effects: *Gastrointestinal*—anorexia, nausea, vomiting, diarrhea, stomatitis, glossitis, enterocolitis, pruritus ani. *Skin*—maculopapular and erythematous rashes; exfoliative dermatitis; photosensitivity; onycholysis, nail discoloration. *Kidney*—dose-related rise in BUN. *Hypersensitivity reactions*—urticaria, angioneurotic edema, anaphylaxis. *Intracranial*—bulging fontanels in young infants. *Teeth*—yellow-brown staining; enamel hypoplasia. *Blood*—anemia, thrombocytopenic purpura, neutropenia, eosinophilia. *Liver*—cholestasis at high dosage.

Upon adverse reaction, stop medication and treat appropriately.

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Suspected tetracycline-sensitive infection?

While waiting for the results of the sensitivity test, start the therapy likely to succeed...

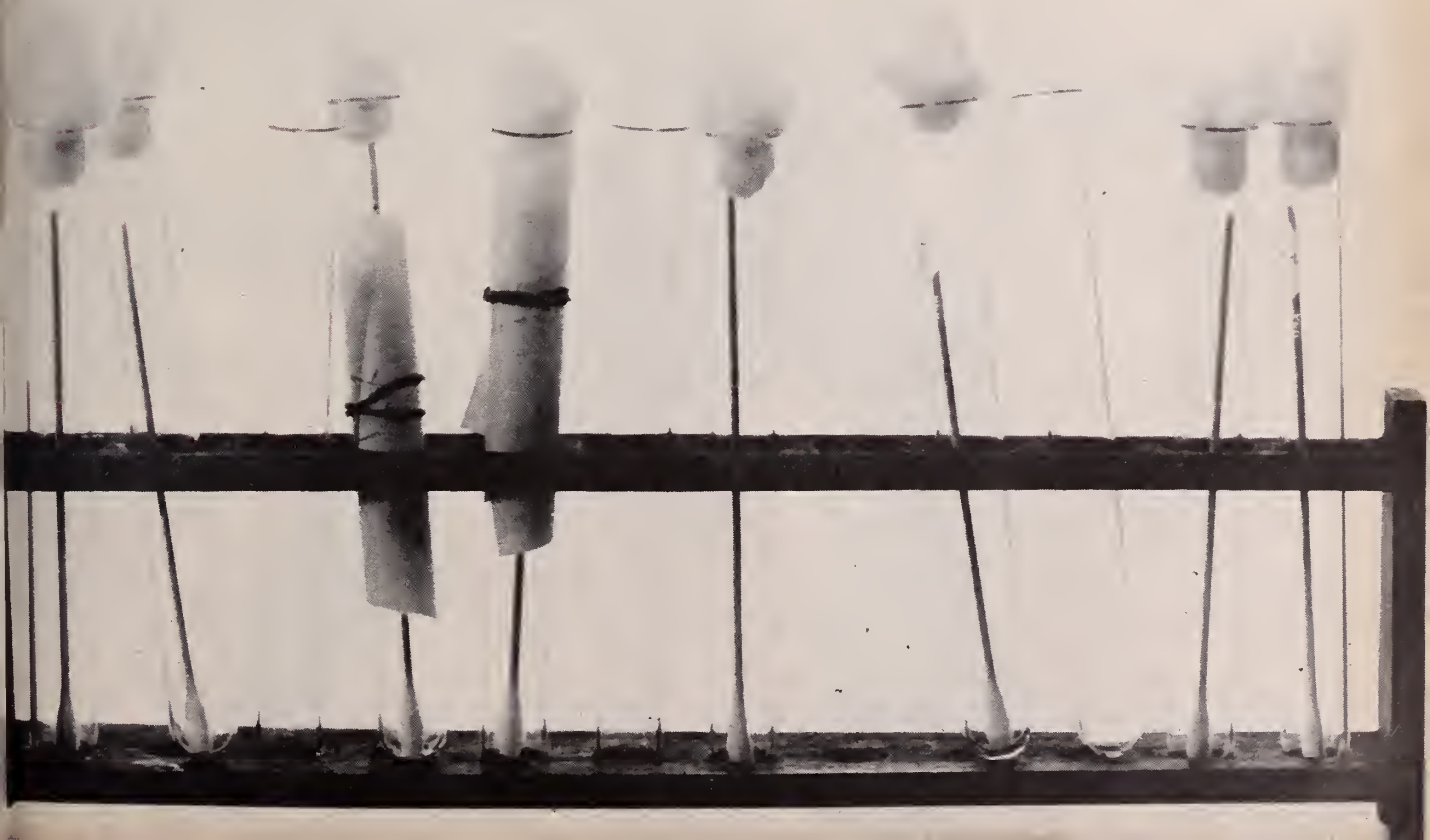
Although of course it can't replace routine sensitivity testing, your prescription for ACHROMYCIN® V, in a way, provides the ultimate test of therapy under rigorous *in vivo* conditions.

Because ACHROMYCIN® V is effective in treating so many common infections—caused by strains of tetracycline-sensitive organisms—doesn't *stat* dosage of this time-tested antibiotic make good sense?

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TETRACYCLINE
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The price differential is inconsequential.




Knee-deep

in osteoarthritic pain

If aspirin doesn't help, move in with Tandearil.

The trial period is brief: 1 week. Try one tablet q.i.d. at first. Tandearil usually starts working within 3 to 4 days. When response occurs, as little as 1 or 2 tablets daily may hold back pain and stiffness, and increase joint motion.

On the next page is a summary of adverse reactions, contraindications, warning and precautions.

Tandearil.
It can help get his mind off his knee.

Please review full Prescribing Information carefully before prescribing.

For osteoarthritic knees, spines, shoulders, hips, etc.:

Tandearil®
oxyphenbutazone

andearil, oxyphenbutazone:
or brief summary see next page.

Geigy

TA-6006



Tandearil®
oxyphenbutazone

Contraindications: Edema; danger of cardiac decompensation; history or symptoms of peptic ulcer; renal, hepatic or cardiac damage; history of drug allergy; history of blood dyscrasia. The drug should not be given when the patient is senile or when other potent drugs are given concurrently.

Warning: This drug is an analog of phenylbutazone; sensitive patients may be cross-reactive. If coumarin-type anticoagulants are given simultaneously, watch for excessive increase in prothrombin time. Instances of severe bleeding have occurred. Persistent or severe dyspepsia may indicate peptic ulcer; perform upper gastrointestinal x-ray diagnostic tests if drug is continued. Pyrazole compounds may potentiate the pharmacologic action of sulfonylurea, sulfonamide-type agents and insulin. Carefully observe patients receiving such therapy. Use with caution in the first trimester of pregnancy, and in patients with thyroid disease.

Precautions: Before prescribing, carefully select patients, avoiding those responsive to routine measures as well as contraindicated patients. Obtain a detailed history and a complete physical and laboratory examination, including a blood count. The patients should not exceed recommended dosage, should be closely supervised and should be warned to discontinue the drug and report immediately if fever, sore throat, or mouth lesions (symptoms of blood dyscrasia), sudden weight gain (water retention), skin reactions, black or tarry stools or other evidence of intestinal hemorrhage occur. Make complete blood counts at weekly intervals during early therapy and at 2-week intervals thereafter. Discontinue the drug immediately and institute countermeasures if the white count changes significantly, granulocytes decrease, or immature forms appear. Use greater care in the elderly and in hypertensives.

Adverse Reactions: The more common are nausea and edema. Swelling of the ankles or face may be minimized by withholding dietary salt, reduction in dosage or use of diuretics. In elderly patients and in those with hypertension, the drug should be discontinued with the appearance of edema. The drug has been associated with peptic ulcer and may reactivate a latent peptic ulcer. The patient should be instructed to take doses immediately after meals or with milk to minimize gastric upset. Drug rash occasionally occurs. If it does, promptly discontinue the drug. Agranulocytosis, exfoliative dermatitis, Stevens-Johnson syndrome, Lyell's syndrome (toxic necrotizing epidermolysis), or a generalized allergic reaction similar to a serum sickness syndrome may occur and require permanent withdrawal of medication. Agranulocytosis can occur suddenly in spite of regular, repeated normal white counts. Stomatitis, salivary gland enlargement, vomiting, vertigo and languor may occur. Leukemia and leukemoid reactions have been reported. While not definitely attributable to the drug, a causal relationship cannot be excluded. Thrombocytopenic purpura and aplastic anemia may occur. Confusional states, agitation, headache, blurred vision, optic neuritis and transient hearing loss have been reported, as have hyperglycemia, hepatitis, jaundice, hypersensitivity angiitis, pericarditis and several cases of anuria and hematuria. With long-term use, reversible thyroid hyperplasia may occur infrequently. Moderate lowering of the red cell count due to hemodilution may occur.

Dosage in Osteoarthritis: Initial: 3 to 6 tablets daily in divided doses. Usually unnecessary to exceed 4 tablets daily. A trial period of one week is considered adequate to determine the therapeutic effect of the drug. Maintenance: Effective level often achieved with 1 or 2 tablets daily, should not exceed 4 tablets daily.

In selecting appropriate dosage in any specific case, consideration should be given to the patient's weight, general health, age and any other factors influencing drug response.

Availability: Tan, round, sugar-coated tablets of 100 mg. in bottles of 100 and 1000.

(B)R-46-800-A

For complete details, please see full Prescribing Information.

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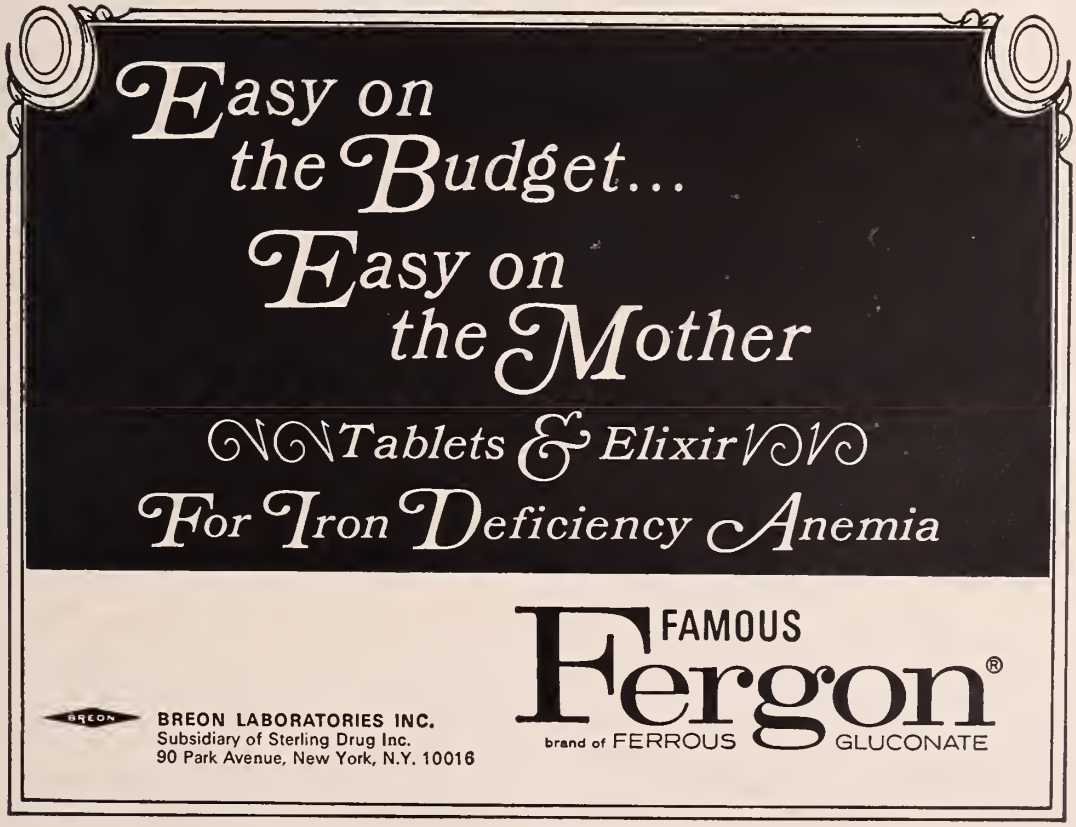
KMA Orientation Program Draws Record Attendance Sept. 23

A record attendance of 78 physicians was reported at the Seventh Orientation Program for new KMA members September 23 by N. Lewis Bosworth, M.D., Lexington, chairman of the Committee on Communication and Health Education.

Since the Orientation Program was approved in a Bylaw amendment by the House of Delegates in 1964, it has been held twice annually at the time of the Interim and Annual Meetings.

The names of those physicians who attended the September 23 program are listed below. If you were present and your name has been omitted from this list, please advise the KMA Headquarters Office.

J. A. Bishop, M.D., Jeffersontown
L. James Black, Jr., M.D., Pikeville
Roy R. Bontrager, M.D., Whitesburg
Walter R. Brewer, M.D., Lexington
Harry G. Caldwell, M.D., Lexington
Stanley Collis, M.D., Louisville
James W. Curry, M.D., Louisville
Fielding W. Daniel, M.D., Louisville
Robert S. Davis, M.D., Harlan
Harry O. DeBandi, Jr., M.D., Madisonville
John C. Devlin, M.D., Louisville
Bob M. DeWeese, M.D., Louisville
Herbert Dickstein, M.D., Louisville
Preston V. Dilts, Jr., M.D., Lexington
William R. Elsea, M.D., Lexington
C. David Eversole, M.D., Ft. Mitchell
Linda S. Fagan, M.D., Richmond
Harold T. Faulconer, M.D., Lexington
Roberto Garcia-Rivera, M.D., Augusta
John A. Green, M.D., Bowling Green
Robert P. Goodman, M.D., Lexington
Kenneth A. Hafendorfer, M.D., Louisville
John N. Hafner, M.D., Louisville
Claude C. Hazlett, M.D., Louisville
Philip J. Hulsman, M.D., Louisville
Jack B. Holt, M.D., Russellville
Brooks Howard, M.D., Louisville
John D. Howard, M.D., Louisville
B. J. Jackson, M.D., Lawrenceburg
Hart James, M.D., Lexington
Becky John, M.D., Hazard
J. Wesley Johnson, M.D., Ashland
Robert K. Johnson, M.D., Covington
Thomas J. Kalmer, M.D., Louisville
William H. Keller, M.D., Frankfort
Robinson P. Kirkpatrick, M.D., Danville
A. W. Krupp, M.D., Louisville
Theodore N. Lynch, M.D., Louisville
J. Marshall Mahan, M.D., Louisville
Laszlo Makk, M.D., Louisville
James M. McEntyre, M.D., Lexington
Charles B. Mercer, M.D., Louisville
Jesse H. Meredith, M.D., Glasgow
Wally O. Montgomery, M.D. Paducah
Gerald L. Moore, M.D., Louisville
Louis M. Muldrow, Jr., M.D., Lexington
Ronald A. Moss, M.D., Lexington
Richard R. Nave, M.D., Louisville
Richard L. O'Conner, M.D., Louisville
Lynn L. Ogden, M.D., Louisville
Lafayette G. Owen, M.D. Louisville
John D. Perrine, M.D., Lexington
Donald L. Peterson, M.D., McKee
Robert Pfeiler, M.D., Louisville
George Alan Playford, M.D., Madisonville
R. L. Rainey M.D., Louisville
Todd G. Richardson, M.D., Louisville
E. D. Roberts, M.D., Murray
Jim L. Rogers, M.D., Madisonville
Max C. Salb, M.D., Kuttawa
Bernard F. Sams, M.D., Louisville
Arthur Seigel, M.D., Bowling Green
Robert M. Senese, M.D., Louisville
Hugh A. Storrow, M.D., Lexington
Paul L. Tagher, M.D., Florence
Joan E. Thomas, M.D., Louisville
Walter L. Thompson, M.D., Louisville
J. Kent Trinkle, M.D., Lexington
W. E. Waltrip, M.D., Owensboro
Thomas R. Watson, M.D., Louisville
Jack H. Welch, M.D., Lexington
Wm. G. Wheeler, Jr., M.D., Lexington
Joseph G. Whelan, Jr., M.D., Louisville
Roger K. White, M.D., Louisville
Kenneth R. Wier, M.D., Lynch
Cornelia B. Wilbur, M.D., Lexington
Robert H. Wilber, M.D., Lebanon
Bernard Weisskopf, M.D., Louisville



KMA Membership Reaches All-Time High This Year

KMA membership of active physicians in the state reached an all-time high this year, according to the records of the membership department as of October 15. The total number of active members is 2297 as compared with last year's record of 2247.

The number of counties with 100% KMA and AMA membership has also surpassed last year's figures. This year 68 counties have 100% membership in KMA and 45 counties have 100% membership in the AMA, as compared to 1967 figures of 58 counties and 40 counties respectively.

Membership figures supplied by the membership department as of October 15 are contained in the chart below. They do not include the associate and emeritus members.

Number of Active Physicians in Kentucky Counties Who Are Members of KMA and AMA

October 15, 1968

COUNTIES	ACTIVE PHYSICIANS	MEMBERS KMA	MEMBERS AMA	COUNTIES	ACTIVE PHYSICIANS	MEMBERS KMA	MEMBERS AMA	COUNTIES	ACTIVE PHYSICIANS	MEMBERS KMA	MEMBERS AMA
Adair	7	6	6	Graves	16	15	15	Menifee (*)	2	2	1
Allen	7	6	6	Grayson	6	5	5	Mercer	11	10	9
Anderson	4	3	2	Green (*)	7	7	6	Metcalfe (*) (**)	1	1	1
Ballard	4	3	3	Greenup (*) (**)	8	8	8	Monroe (*) (**)	7	7	7
Barren	24	23	21	Hancock (*)	2	2	1	Montgomery	9	7	6
Bath	3	2	1	Hardin	26	24	16	Morgan (*)	3	3	2
Bell	27	26	25	Harlan	40	36	34	Muhlenberg (*)	12	12	11
Boone (*) (**)	15	15	15	Harrison	8	7	3	Nelson (*) (**)	7	7	7
Bourbon	13	12	6	Hart	6	5	5	Nicholas (*) (**)	2	2	2
Boyd	53	52	51	Henderson	30	28	28	Ohio (*)	5	5	2
Boyle	24	17	9	Henry (*) (**)	3	3	3	Oldham (*)	8	8	7
Bracken	4	3	2	Hickman (*) (**)	2	2	2	Owen (*) (**)	2	2	2
Breathitt (*) (**)	3	3	3	Hopkins	42	40	37	Owsley (*) (**)	4	4	4
Breckinridge	5	4	4	Jackson (*) (**)	1	1	1	Pendleton (*)	3	3	1
Bullitt (*) (**)	4	4	4	Jefferson	825	767	607	Perry (*)	17	17	14
Butler (*) (**)	2	2	2	Jessamine (*)	6	6	3	Pike	43	24	23
Caldwell	6	5	5	Johnson (*) (**)	11	11	11	Powell	2	1	1
Calloway	18	17	17	Kenton—See Campbell				Pulaski (*)	26	26	24
Campbell-Kenton	148	141	119	Knott (*) (**)	2	2	2	Robertson	1	0	0
Carlisle (*) (**)	2	2	2	Knox	8	7	3	Rockcastle	2	1	0
Carroll (*)	5	5	4	Larue (*)	3	3	1	Rowan (*) (**)	7	7	7
Carter	3	0	0	Laurel (*)	10	10	9	Russell (*) (**)	4	4	4
Casey (*) (**)	5	5	5	Lawrence (*) (**)	8	8	8	Scott (*)	8	8	2
Christian	41	34	34	Lee (*) (**)	1	1	1	Shelby (*) (**)	7	7	7
Clark	13	12	11	Leslie	3	2	2	Simpson	8	7	4
Clay (*) (**)	5	5	5	Letcher	14	12	11	Spencer (*) (**)	2	2	2
Clinton (*) (**)	2	2	2	Lewis	2	0	0	Taylor (*) (**)	6	6	6
Crittenden (*) (**)	2	2	2	Lincoln (*) (**)	3	3	3	Todd (*)	4	4	3
Cumberland (*) (**)	2	2	2	Livingston	4	3	2	Trigg (*)	6	6	5
Daviess	65	64	58	Logan (*)	10	10	8	Trimble (*) (**)	2	2	2
Edmonson (*) (**)	2	2	2	Lyon (*)	3	3	2	Union	4	3	3
Elliott	2	1	1	McCracken	63	54	55	Warren	49	48	42
Estill (*) (**)	5	5	5	McCreary (*) (**)	2	2	2	Washington (*) (**)	5	5	5
Fayette	416	313	272	McLean	4	3	0	Wayne (*)	6	6	5
Fleming (*)	4	4	1	Madison	24	23	20	Webster (*) (**)	3	3	3
Floyd	22	10	9	Magoffin (*) (**)	2	2	2	Whitley	19	18	16
Franklin	38	32	27	Marion (*) (**)	8	8	8	Wolfe (*) (**)	1	1	1
Fulton (*) (**)	9	9	9	Marshall (*) (**)	10	10	10	Woodford (*)	7	7	2
Gallatin (*) (**)	1	1	1	Martin (*) (**)	2	2	2				
Garrard (*) (**)	3	3	3	Mason	13	12	10	Totals	2578	2297	1950
Grant (*) (**)	4	4	4	Meade (*)	3	3	1				

* 100% KMA ** 100% AMA

Note: Report includes teaching staffs at medical schools, physicians in public health, mental institutions, TB hospitals, VA hospitals, etc.

AMA Urges Influenza Vaccine For High-Risk Groups

The AMA Council on Environmental and Public Health predicts a possible influenza outbreak in the United States this winter and urges physicians to administer currently available vaccine to all high-risk groups.

The occurrence of an increased amount of influenza recently in Hong Kong, due to a considerably altered strain of A_2 (Asian) influenza virus, has led the AMA Council to expect a similar outbreak here. Current bivalent and polyvalent vaccines may provide only limited protection against the new strain (A_2 Hong Kong/68), and it may take from three to six months for manufacturers to develop and produce a monovalent vaccine containing it, the Council stated.

Although high-risk groups should receive top priority for the new vaccine when it becomes available, the Council urges that they be immunized now with the vaccine that is on hand. High-risk groups are defined as persons over 45 and those with chronic illnesses such as rheumatic heart disease, cardiovascular disorders and bronchopulmonary diseases.

The Council recommends that individual phy-

sicians report increased incidence of flu-like respiratory disorders promptly to local and state health officials for early identification of the causative virus.

Norton Infirmary Schedules Annual Seminar Dec. 5

The Eleventh Annual Norton Seminar has been scheduled December 5 at Norton Memorial Infirmary, Louisville, according to Lonnie W. Howerton, Jr., M.D., Louisville, Seminar coordinator.



Doctor Siperstein

A number of scientific topics will be discussed by Seminar participants with emphasis on the subject of diabetes. The guest speaker will be Marvin D. Siperstein, M.D., professor of internal medicine at the University of Texas Southwestern Medical School at Dallas.

Doctor Siperstein will discuss "Studies on Nature of Vascular Diseases of Diabetes Mellitus" and "Diagnosis and Management of Hyperlipemic States," according to Doctor Howerton.

A 1948 graduate from the University of Minnesota Medical School, Doctor Siperstein is the recipient of the Lilly Award of the American Diabetes Association and the Research Career Award from the National Heart Institute of the National Institutes of Health. He is a member of many professional societies.

All Kentucky physicians are invited to attend the Seminar in which a number of Norton staff members will participate, Doctor Howerton said.

KPM Board Honors Dr. Miller

Oscar O. Miller, M.D., Louisville, received the first title of Director Emeritus to Kentucky Blue Shield from the Board of Directors of Kentucky Physicians Mutual, Inc. on September 21. A member of the Board since its inception in 1949, Doctor Miller was instrumental in the formation of the Kentucky Blue Shield Plan.

Annual Meeting Guest Speakers Enjoy Kentucky Hospitality

"Speaking for Ted Light, M.D., president, Ohio State Medical Association, and for myself, I wish to thank you again for the fruit basket and all courtesies shown me at your Annual Meeting."

Lawrence C. Meredith, M.D.
Past-President
Ohio State Medical Association
Elyria, Ohio

"The great hospitality extended me when I was in Louisville was truly 'Southern Style' and I enjoyed myself tremendously. I'm just sorry I couldn't bask in it longer. Thanks again for everything."

The Honorable George Nigh
Lieutenant Governor
State of Oklahoma
Oklahoma City, Oklahoma

"Thank you for inviting me to the Kentucky State meeting. It was a most pleasant experience."

Sidney Olansky, M.D.
Chairman, Section of Dermatology
Emory University School of Medicine
Atlanta, Georgia

"Thank you very much for the pleasant time you provided for me in Kentucky. I enjoyed very much visiting you."

Henning Pontoppidan, M.D.
Department of Anaesthesia
Massachusetts General Hospital
Boston, Massachusetts

"I would like to express my appreciation to you for the gracious reception and kind hospitality extended to me as a guest speaker of your Association. This opportunity was, indeed, a rewarding and stimulating experience."

William M. Sheppe, Jr., M.D.
Department of Psychiatry
University of Virginia Medical Center
Charlottesville, Virginia

COMPARATIVE REGISTRATION FIGURES

KMA Annual Meetings

	Louisville 1959	Louisville 1960	Louisville 1961	Louisville 1962	Lexington 1963	Louisville 1964	Louisville 1965	Louisville 1966	Louisville 1967	Louisville 1968
KMA Members	997	1021	996	1014	865	924	1172	1016	957	1011
Guest Physicians	165	203	194	208	141	157	138	195	152	153
Interns-Residents	128	105	102	102	69	108	132	121	94	103
Medical Students	280	289	237	176	59	128	193	209	222	185
Registered Nurses	34	25	31	59	31	34	27	33	24	42
Exhibitors	200	239	204	232	212	297	297	312	272	256
Guests	86	99	132	123	132	125	172	126	115	332
Technicians— Office Assistants	63	33	57	71	22	61	55	46	31	29
TOTAL ATTENDANCE	1953	2014	1953	1985	1531	1844	2186	2058	1867	2111

"Would you please convey to all the members my sincere thanks for asking me to participate. Kentucky hospitality was again tremendously evident during my time in Louisville, for which I am very grateful."

Jerome F. Wiot, M.D.
Department of Radiology
Cincinnati General Hospital
Cincinnati, Ohio

"I thoroughly enjoyed my visit to Louisville as guest speaker for the Kentucky Medical Association. I wish to thank the officers of the Association for the many kindnesses extended to me on this visit."

Robert J. Freeark, M.D.
Director, Division of Surgery
Cook County Hospital
Chicago, Illinois

Spontaneous Pneumothorax

(Continued from page 977)

Supportive measures such as tracheostomy, bronchoscopy, and IPPB are not necessary if careful attention is given to tracheal suction, coughing, etc. The problem is not the associated disease but the marked burden that even a minimal pneumothorax causes the emphysematous patient. The first objective in this situation must be to correct the pneumothorax. We do use ventilatory assistance when indicated in the post-thoracotomy patient; however, only one tracheostomy was required in this entire group of patients.

Summary

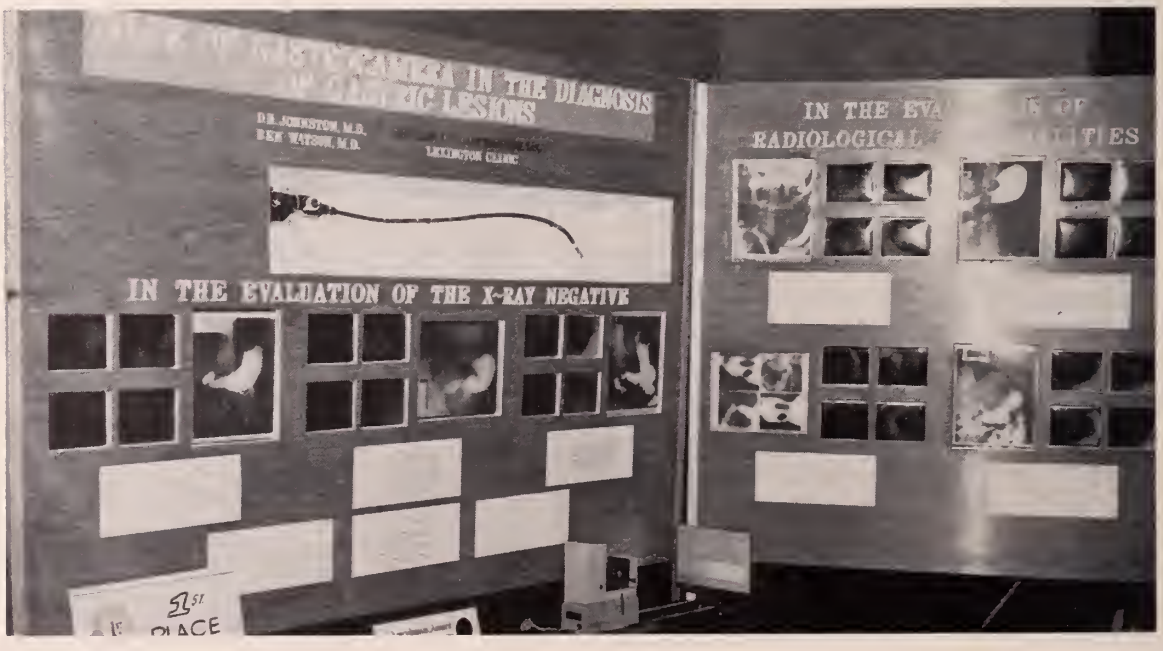
We recommend an aggressive approach to restoration of desirable physiological conditions as the most conservative method to re-establishment of the patient's health and elimination of extended hospital stay, which unnecessarily keeps patients from their work and livelihood. Normal conditions must be restored at the earliest possible moment.

We use thoracostomy tubes as the initial treatment of the first uncomplicated pneumothorax with more than 10 percent lung collapse.

Twenty-six thoracotomies with excision of blebs and pleurodesis were necessary and performed on 23 patients. Eleven of these patients were aged 50 and over. Spontaneous pneumothorax in patients aged 40 and over, although complicated, can be managed with an acceptable morbidity and mortality by prompt and judicious therapy.

References

1. Adler, Richard H., Spontaneous Pneumothorax, *Hospital Medicine*, Vol. 1, No. 9, May 1965.
2. Klassen, K. P./Meckstroth, C. V., Treatment of Spontaneous Pneumothorax, *Journal of the American Medical Association*, Vol. 182, No. 1, October 6, 1962, pages 1-5.
3. Mayo, Porter, Spontaneous Pneumothorax, Results of Pulmonary Resection, *Journal of the Kentucky State Medical Association*, April 1957.
4. Mayo, Porter, Spontaneous Hemopneumothorax, *Diseases of the Chest*, Vol. 40, No. 5, November 1961.
5. Mayo, Porter, Recurrent Spontaneous Pneumothorax concomitant With Menstruation, *Journal of Thoracic and Cardiovascular Surgery*, Vol. 46, No. 3, pages 415-416, September 1963.
6. Shields, T. W./Oilschlager, G. A., Spontaneous Pneumothorax in Patients 40 Years of Age and Older, *The Annals of Thoracic Surgery*, Vol. 2, No. 3, pages 377-381, May 1966.



The prize-winning scientific exhibit at the Annual Meeting, "The Value of Gastrocamera Endorcopy," was presented by D. H. Johnston, M.D. and Ben Watson, M.D., Lexington. They received a plaque and check for $200 from Mead-Johnson Laboratories, annual sponsor of the Aesculapius Award.

Was Your Delegate Present?

ROLL CALL—
1968 House of Delegates
KMA Annual Meeting

OFFICERS

		First Session	Second Session
Speaker	Richard F. Greathouse	Present	Present
Vice-Speaker	Carl Cooper, Jr.	Present	Present
President	George F. Brockman	Present	Present
President-Elect	Henry B. Asman	Present	Present
Vice-President	Glenn W. Bryant	.....	Present
Vice-President	J. Sankey Williams	Present	Present
Vice-President	Luther M. Wilson	Present	Present
Secretary	S. Randolph Scheen	Present	Present
Treasurer	Keith P. Smith	Present	Present
Delegate to AMA	J. Thomas Giannini	Present	Present
Delegate to AMA	Charles C. Rutledge	Present	Present
Delegate to AMA	John C. Quertermous	Present	Present
Alternate Delegate to the AMA	Charles G. Bryant	Present	Present
Alternate Delegate to the AMA	Daryl P. Harvey	.....	Present
Alternate Delegate to the AMA	David B. Stevens	Present	Present

TRUSTEES

District			
First	Joseph R. Miller	Present	Present
Second	William W. Hall	Present	Present
Third	Gabe A. Payne, Jr.	Present	Present
Fourth	Henry S. Spalding	.....	.....
Fifth	George A. Sehlinger	Present	Present
Sixth	Rex E. Hayes	Present	Present
Seventh	Donald Chatham	.....	Present
Eighth	LeRoy C. Hess	Present	Present
Ninth	J. Campbell Cantrill	Present	Present
Tenth	Andrew M. Moore	Present	Present
Eleventh	Douglas H. Jenkins	Present	Present
Twelfth	Robert F. Long	.....	.....
Thirteenth	Walter L. Cawood	Present	Present
Fourteenth	Ballard W. Cassady	Present	Present
Fifteenth	E. C. Seeley	Present	Present

PAST PRESIDENTS

Past President	Robert E. Pennington	Present	Present
Past President	Everett H. Baker	.....	Present
Past President	Delmas Clardy	Present	Present
Past President	George Archer	.....	Present
Past President	David M. Cox	Present	Present

DELEGATES

First District

County		First Session	Second Session
BALLARD	Glenn Baird	.....	.....
CALLOWAY	Hugh L. Houston (Alt.)	Present	Present
CARLISLE			
FULTON	R. W. Bushart	.....	.....
GRAVES	C. F. Burnett	.....	.....
HICKMAN	C. J. Mills	.....	.....
LIVINGSTON			
McCRACKEN	Walter Johnson	Present	Present
	W. Eugene Sloan	Present	Present
	Edwin T. Davis	.....	Present
MARSHALL	Keith Ellis	Present	Present

Second District

DAVIESS	R. J. Phillips	Present	Present
	J. S. Oldham	Present	Present
	Joseph C. Stiles	Present	Present
HANCOCK	B. P. Smith	Present	Present
HENDERSON	Kenneth Eblen	Present	Present
	Charles Kissinger	Present	Present
McLEAN	W. G. Edds	.....	Present
OHIO	Robert Norsworthy	.....	.....
UNION	Wallas N. Bell	Present	Present
WEBSTER	Paul M. Taylor	Present	Present

Third District

CALDWELL	Ralph Cash	.....	.....
CHRISTIAN	W. Faxon Payne	Present	Present
	Norma T. Shepherd	Present	Present
CRITTENDEN	R. M. Brandon	.....	.....
HOPKINS	Loman C. Trover	Present	.....
	Paull Trover	Present	Present
	Charles R. Fisher (Alt.)	.....	Present
LYON	Robert H. Hyde	.....	.....
MUHLENBERG	Robert Robbins	Present	Present
TODD	Ralph D. Lynn	Present	Present
TRIGG	Thornton Bryan	Present	Present

Fourth District

BRECKINRIDGE	James G. Sills	.....	.....
BULLITT	W. B. Hamilton	Present	Present
GRAYSON	A. L. Embry	.....	Present
GREEN	George C. Cheatham	Present	.....
HARDIN	Fred C. Rainey	Present	Present
HART	J. E. McAfee	.....	.....
LARUE	Marion A. Douglas, Jr.	Present	Present
MARION	Robert H. Wilber	Present	Present
MEADE			
NELSON	Emmett Wood	Present	Present
TAYLOR			
WASHINGTON	M. A. Coyle	Present	Present

Fifth District

JEFFERSON	James G. Baker	Present	Present
	E. Dean Canan	Present	Present
	Stanley Collis	Present	Present
	William Durham	Present	Present
	Harold G. Eskind	.....	Present
	Frank Gaines	Present	Present
	John Goldsborough	.....	Present
	Richard Greathouse	Present	Present
	Cecil Grumbles	.....	Present
	N. I. Handelman	.....	Present
	Stuart E. Harlowe	Present	Present
	John Hemmer	.....	Present
	Roy A. Martin	Present	Present
	Edward Maxwell	Present	Present
	Robert L. McClendon	Present	Present
	William C. Mitchell	Present	Present
	Herman Moore	Present	Present
	F. Albert Olash	.....	Present
	Bernard I. Popham	Present	Present
	John Robbins	.....	.....
	Carroll Robie	Present	Present
	W. Fielding Rubel	Present	Present
	David C. Shipp	Present	Present
	Charles C. Smith	Present	Present
	Donn L. Smith	.....	Present
	Robert C. Tate	Present	Present
	Robert S. Tillett	Present	.....
	Donald Varga	Present	Present
	William VonderHaar	Present	Present
	Will W. Ward, Jr.	Present	Present
	Lloyd Yopp	Present	Present
	John H. Doyle (Alt.)	.....	Present
	Wesley G. Farnsley (Alt.)	Present	Present

Sixth District

ADAIR	James C. Salato	Present	Present
ALLEN	Earl P. Oliver	Present	Present
BARREN	William H. Bryant	Present	.....
	Lewis Dickinson (Alt.)	.....	Present
BUTLER	D. G. Miller	.....	.....
CUMBERLAND	Robert Chambliss	.....	Present
EDMONSON			
LOGAN	Jack B. Holt	Present	Present
METCALFE			
MONROE	John Marsh	.....	.....
SIMPSON	Douglas R. Alvey	.....	.....
WARREN	Paul J. Parks	Present	Present
	J. O. Willoughby	Present	Present

The information in the Roll Call was taken from the attendance record cards signed by the delegates prior to the meetings of the House, September 23 and 25.

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		First Session	Second Session
	Seventh District		
ANDERSON	Boyd Caudill	Present	.....
CARROLL	Edgar S. Weaver	.....	.....
FRANKLIN	Sandford L. Weiler	.....	Present
	Harold L. Johnson	Present	Present
GALLATIN			
GRANT	Fred R. Scroggin	.....	.....
HENRY	Robert Houston	.....	.....
OLDHAM			
OWEN	Oscar A. Cull	.....	.....
SHELBY	W. P. McKee	.....	.....
SPENCER	L. K. Skaggs	.....	.....
TRIMBLE	Carl Cooper, Jr.	Present	Present
	Eighth District		
BOONE	John D. Ammon	Present	Present
CAMPBELL-	Carl J. Brueggemann	Present	.....
KENTON	Donald K. Dudderar	.....	Present
	Donald Janney	Present	Present
	Thomas L. Heavern, Jr.	Present	Present
	Howard A. Heringer Jr. (Alt.)	Present	Present
	Louis J. Nutini	Present	.....
	Ninth District		
BATH			
BOURBON	Richard Wever	Present	.....
BRACKEN	J. M. Stevenson	Present	Present
FLEMING	Samuel W. Gehring	.....	.....
HARRISON	Henry H. Moody	Present	.....
MASON			
NICHOLAS	W. R. Kingsolver	.....	.....
PENDLETON	Robert L. McKenney	.....	.....
SCOTT	D. V. Hollingsworth	Present	Present
ROBERTSON			
	Tenth District		
FAYETTE	John F. Berry, Jr.	Present	Present
	Leslie W. Blakey	Present	Present
	M. Cary Blaydes	Present	Present
	Peter P. Bosomworth	Present	Present
	N. L. Bosworth	Present	Present
	Thomson R. Bryant, Jr.	Present	Present
	Winston L. Burke	Present	Present
	Richard D. Floyd	Present	Present
	Carl H. Fortune	Present	Present
	David A. Hull	Present	.....
	William S. Jordan, Jr.	Present	.....
	Irving F. Kanner	Present	Present
	Richard B. McElvein	Present	Present
	Carl Scott (Alt.)	.....	Present
	Tom F. Wheyne (Alt.)	.....	Present
JESSAMINE	J. Sankey Williams	Present	Present
WOODFORD	C. Noel Hall	Present	.....
	Eleventh District		
CLARK			
ESTILL	Charles E. Terry	.....	.....
JACKSON	D. L. Peterson	Present	.....
LEE			
MADISON	W. D. Epling (Alt.)	Present	Present
	William P. Grise	Present	Present
MENIFEE	D. L. Graves	.....	.....
MONTGOMERY	R. J. Salisbury	Present	Present
OWSLEY	M. B. Gabbard	.....	Present
POWELL	Charles G. Noss	.....	.....
WOLFE			
	Twelfth District		
BOYLE	John M. Baird	Present	.....
CASEY	George W. Sweeney	.....	.....
CLINTON	E. A. Barnes	.....	.....
GARRARD	Paul J. Sides	Present	Present
LINCOLN	H. I. Frisbie	.....	.....
McCREARY	H. A. Perry	.....	.....
MERCER	E. H. John	.....	.....
PULASKI	S. B. Kelley	Present	.....
	William M. Wyatt	Present	.....
ROCKCASTLE			
RUSSELL	Charles E. Peck	Present	.....
WAYNE	John W. Simmons	.....	Present
	Thirteenth District		
BOYD	Guy Cunningham	Present	Present
	John Harrison	Present	Present
	Clyde C. Sparks	Present	Present
CARTER			
ELLIOTT	John F. Greene	.....	.....

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		First Session	Second Session
GREENUP	Billy Riddle	.....	.....
LAWRENCE	A. B. Richards (Alt.)	Present	Present
LEWIS			
MORGAN	George Bellamy	.....	.....
ROWAN	C. Louise Caudill	Present	Present
	Fourteenth District		
BREATHITT	F. C. Lewis	.....	.....
FLOYD	Lowell Martin	.....	Present
JOHNSON	Glenn R. Powell	Present	Present
KNOTT	D G. Barker	.....	Present
LETCHER	Jim B. Tolliver	.....	.....
MAGOFFIN			
MARTIN	Raymond D. Wells	.....	.....
PERRY	Keith Cameron	.....	Present
PIKE	Harvey A. Page	Present	.....
	Fifteenth District		
BELL	Francis A. Forde	Present	Present
	Charles B. Stacy	Present	Present
CLAY	W. E. Becknell	Present	Present
HARLAN	Henry C. Evans	Present	Present
	Doane Fischer	Present	Present
KNOX	H. L. Bushey	Present	Present
LAUREL	John Rypstra	Present	Present
LESLIE	Mary Pauline Fox	Present	Present
WHITLEY	R. D. Pitman (Alt.)	Present	.....

Blue Shield VP's Elected

The Board of Directors of Kentucky Physicians Mutual, Inc. elected Avil L. McKinney vice president of external operations and John C. Watkins vice president of internal operations of Kentucky Blue Shield September 21. Both had previously been elected vice presidents of Kentucky Blue Cross by the Blue Cross Hospital Plan, Inc. Board.

Southern Medical Assn. To Meet

The 62nd Annual Meeting of the Southern Medical Association has been scheduled November 18-21 at the Rivergate Hotel, New Orleans, La. Special features of the meeting will include scientific sessions and meetings of 21 specialty groups, color TV, discussion groups, exhibits and entertaining social functions.

William B. Walsh, M.D., of the Good Ship HOPE, will speak at the President's Luncheon November 19 at the Roosevelt Hotel.

Dr. Rush To Head Cancer Society

Benjamin F. Rush, Jr., M.D., Lexington, was elected president of the Kentucky Division of the American Cancer Society at the Division's annual meeting September 19 in Louisville. H. Davis Chipps, M.D., Lexington, was named president-elect.

SPECIAL ARTICLE

(*Continued from page 985*)

and it would need to establish criteria of physician excellence based on objective, but realistic, standards. Such a body would be reassuring to us, to our patients, and to government. For organized medicine, such a body would have the advantage of an influence over the performance of non-member physicians which we will never be able to attain.



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In Memoriam

WOODFORD B. BISHOP, M.D.
Grayson
1908-1968

Woodford B. Bishop, M.D., 59, a Grayson physician for 31 years, died September 21 in King's Daughters' Hospital, Ashland. Doctor Bishop graduated from the University of Louisville School of Medicine in 1937 and was a member of the staff of the J. Q. Stovall Memorial Hospital.

MAX BORNSTEIN, M.D.
Louisville
1898-1968

Max Bornstein, M.D., 69, an eye, ear, nose and throat specialist and reconstructive plastic surgeon, died October 8 at the Four Courts Hebrew Home. Doctor Bornstein graduated from the University of Louisville School of Medicine in 1924 and taught there for 44 years.

SHELBY CARR, M.D.
Richmond
1905-1968

Shelby Carr, M.D., 65, a Richmond practitioner since 1936, died September 20 at M.D. Anderson Hospital, Houston, Texas. A graduate of Louisiana State University School of Medicine, Doctor Carr was a member of the Southeastern Surgical Congress and the Southern Medical Association.

CLIVE A. MOSS, M.D.
Williamsburg
1887-1968

Clive A. Moss, M.D., 80, a Williamsburg opthalmologist, died September 16 at his home. Death was attributed to a heart attack. Doctor Moss graduated from the University of Louisville School of Medicine in 1909. He served in the Medical Reserve Corps in France during World War I and returned to Williamsburg to begin practice with his father.

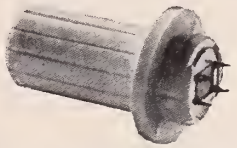
JOHN J. ROLF, M.D.
Covington
1904-1968

John J. Rolf, M.D., 63, a Covington physician for 39 years, died September 17 at St. Elizabeth Hospital. Death was attributed to a heart attack. A 1930 graduate of the University of Cincinnati College of Medicine, Doctor Rolf was a past president of the Campbell-Kenton County Medical Society. In 1954 he was named Outstanding General Practitioner of the Year by the Kentucky Academy of General Practice.

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(Act of October 23, 1962; Section 4369, Title 39, United States Code)

1. Date of Filing: September 19, 1968

2. Title of Publication: THE JOURNAL OF THE KENTUCKY MEDICAL ASSOCIATION.

3. Frequency of issue: Monthly

4. Location of known office of publication: 3532 Janet Avenue, Louisville, Jefferson County, Kentucky 40205.

5. Location of the headquarters or general business offices of the publishers: Same as above.

6. Names and addresses of Publishers, Editor, and Managing Editor: Publisher—Kentucky Medical Association, 3532 Janet Avenue, Louisville, Ky., 40205. Editor—Walter S. Coe, M.D., 568 Medical Towers South, Louisville, Ky., 40202. Managing Editor—Robert G. Cox, 3532 Janet Avenue, Louisville, Ky., 40205.

7. Owner: Kentucky Medical Association.

8. Known bondholders, mortgagees, and other security holders owning or holding 1 per cent or more of total amount of bonds, mortgages or other securities: None.

9. Paragraphs 7 and 8 include, in cases where the stockholder or security holder appears upon the books of the company as trustee or in any other fiduciary relation, the name of the person or corporation for whom such trustee is acting, also the statements in the two paragraphs show the affiant's full knowledge and belief as to the circumstances and conditions under which stockholders and security holders who do not appear upon the books of the company as trustees, hold stock and securities in a capacity other than that of a bona fide owner. Names and addresses of individuals who are stockholders of a corporation which itself is a stockholder or holder of bonds, mortgages or other securities of the publishing corporation have been included in paragraphs 7 and 8 when the interests of such individuals are equivalent to 1 percent or more of the total amount of the stock or securities of the publishing corporation.

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B. Paid circulation		
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2. Mail subscriptions:	2554	2589
C. Total paid circulation:	2644	2680
D. Free distribution including samples by mail, carrier, or other means:	356	383
E. Total distribution:	3000	3063
F. Office use, left-over, unaccounted, spoiled after printing:	140	87
G. Total:	3140	3150

I certify that the statements made by me above are correct and complete.

Robert G. Cox, Managing Editor

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In the complex picture of moderate to severe anxiety...



there is a new reason for prescribing Mellaril (Thioridazine HCl)

effectiveness in mixed anxiety-depression

Long recognized for its usefulness in the treatment of moderate to severe anxiety, Mellaril is now also known to be effective against mixed anxiety-depression.

Often the symptoms of anxiety states are difficult to sort out—even with the most careful probing. The patient may manifest symptoms of agitation, restlessness, insomnia, somatic complaints. But what of the depression that may be mixed in the total picture? It is reassuring to know that Mellaril may be prescribed—with strong possibilities of success—when there is anxiety alone or a mixture of anxiety and depression.

Before prescribing or administering, see Sandoz literature for full product information, including adverse reactions reported with phenothiazines. The following is a brief precautionary statement.

Contraindications: Severe central nervous system depression, comatose states from any cause, hypertensive or hypotensive heart disease of extreme degree.

Warnings: Administer cautiously to patients who have previously exhibited a hypersensitivity reaction (e.g., blood dyscrasias, jaundice) to phenothiazines. Phenothiazines are capable of potentiating central nervous system depressants (e.g., anesthetics, opiates, alcohol, etc.) as well as atropine and phosphorus insecticides. During pregnancy, administer only when necessary.

Precautions: There have been infrequent reports of leukopenia and/or agranulocytosis and convulsive seizures. In epileptic patients, anticonvulsant medication should also be maintained. Pigmentary retinopathy may be avoided by remaining within the recommended limits of dosage. Administer cautiously to patients participating in activities requiring complete mental alertness (e.g., driving). Orthostatic hypotension is more common in females than in males. Do not use epinephrine in treating drug-induced hypotension. Daily doses in excess of 300 mg. should be used only in severe neuropsychiatric conditions.

Adverse Reactions: *Central Nervous System*—Drowsiness, especially with large doses, early in treatment; infrequently, pseudoparkinsonism and other extrapyramidal symptoms; nocturnal confusion, hyperactivity, lethargy, psychotic reactions, restlessness, and headache. *Autonomic Nervous System*—Dryness of mouth, blurred vision, constipation, nausea, vomiting, diarrhea, nasal stuffiness, and pallor. *Endocrine System*—Galactorrhea, breast engorgement, amenorrhea, inhibition of ejaculation, and peripheral edema. *Skin*—Dermatitis and skin eruptions of the urticarial type, photosensitivity. *Cardiovascular System*—Changes in the terminal portion of the electrocardiogram have been observed in some patients receiving the phenothiazine tranquilizers, including Mellaril (thioridazine hydrochloride). While there is no evidence at present that these changes are in any way precursors of any significant disturbance of cardiac rhythm, several sudden and unexpected deaths apparently due to cardiac arrest have occurred in patients previously showing electrocardiographic changes. The use of periodic electrocardiograms has been proposed but would appear to be of questionable value as a predictive device. *Other*—A single case described as parotid swelling.

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of pain, stiffness and tenderness...and also a lot of fis
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If it doesn't work in a week, forget

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Contraindications: Edema; danger of cardiac decompensation; history or symptoms of peptic ulcer; renal, hepatic or cardiac damage; history of drug allergy; history of blood dyscrasia. The drug should not be given when the patient is senile or when other potent drugs are given concurrently. Large doses of the alka formulation are contraindicated in glaucoma.

Warning: If coumarin-type anticoagulants are given simultaneously, watch for excessive increase in prothrombin time. Instances of severe bleeding have occurred. Persistent or severe dyspepsia may indicate peptic ulcer; perform upper gastrointestinal x-ray diagnostic tests if drug is continued. Pyrazole compounds may potentiate the pharmacologic action of sulfonylurea, sulfonamide-type agents and insulin. Carefully observe patients receiving such therapy. Use with caution in the first trimester of pregnancy and in patients with thyroid disease.

Precautions: Before prescribing, carefully select patients, avoiding those responsive to routine measures as well as contraindicated patients. Obtain a detailed history and a complete physical and laboratory examination, including a blood count. Patients should not exceed recommended dosage, should be closely supervised and should be warned to discontinue the drug and report immediately if fever, sore throat, or mouth lesions (symptoms of blood dyscrasia); sudden weight gain (water retention); skin reactions; black or tarry stools or other evidence of intestinal hemorrhage occur. Make complete blood counts at weekly intervals during early therapy and at 2-week intervals thereafter. Discontinue the drug immediately and institute countermeasures if the white count changes significantly, granulocytes decrease, or immature forms appear. Use greater care in the elderly and in hypertensives.

Adverse Reactions: The more common are nausea and edema. Swelling of the ankles or face may be minimized by withholding dietary salt, reduction in dosage or use of diuretics. In elderly patients and in those with hypertension the drug should be discontinued with the appearance of edema. The drug has been associated with peptic ulcer and may reactivate a latent peptic ulcer. The patient should be instructed to take doses immediately before or after meals or with milk to minimize gastric upset. Drug rash occasionally occurs. If it does, promptly discontinue the drug. Agranulocytosis, exfoliative dermatitis, Stevens-Johnson syndrome, Lyell's syndrome (toxic necrotizing epidermolysis), or a generalized allergic reaction similar to serum sickness may occur and require permanent withdrawal of medication. Agranulocytosis can occur suddenly in spite of regular, repeated normal white counts. Stomatitis, salivary gland enlargement, vomiting, vertigo and languor may occur. Leukemia and leukemoid reactions have been reported. While not definitely attributable to the drug, a causal relationship cannot be excluded. Thrombocytopenic purpura and aplastic anemia may occur. Confusional states, agitation, headache, blurred vision, optic neuritis and transient hearing loss have been reported, as have hyperglycemia, hepatitis, jaundice, hypersensitivity angiitis, pericarditis and several cases of anuria and hematuria. With long-term use, reversible thyroid hyperplasia may occur infrequently. Moderate lowering of the red cell count due to hemodilution may occur.



Dosage in Painful Shoulder: Initial: 3 to 6 capsules daily in 3 or 4 equal doses. Trial period: 1 week. Maintenance dosage should not exceed 4 capsules daily; response is often achieved with 1 or 2 capsules daily.

In selecting the appropriate dosage in any specific case, consideration should be given to the patient's weight, general health, age and any other factors influencing drug response.

(B) 46-070-B

For complete details, please see full prescribing information.

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Division of Geigy Chemical Corporation
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and so are
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As maintenance therapy during the active phase of depression, Tofrānil can often help prevent relapse.

The use of Tofrānil in patients receiving M.A.O.I.'s is contraindicated. In patients with cardiovascular disease, thyroid disorders, increased intraocular pressure; in those receiving anticholinergics (including antiparkinsonism agents), thyroid medication or antihypertensive adrenergic neuron-blocking agents; and in those in their first trimester of pregnancy – the special precautions listed in the Prescribing Information should be carefully observed.

Toxic reactions severe enough to require discontinuation of Tofrānil are uncommon. However, for complete details, please refer to the complete Prescribing Information.

Turn page for brief summary of Prescribing Information.

Tofrānil® imipramine hydrochloride
Geigy

in depression





Tofrānil® Geigy

imipramine
hydrochloride

Tofrānil®, imipramine hydrochloride
Indications: Tofrānil is recommended for the treatment of depressive states of diverse psychopathology.
Contraindications: The concomitant use of this agent and monoamine oxidase inhibiting (M.A.O.I.) compounds is contraindicated. Hyperpyretic crises or severe convulsive seizures may occur. Potentiation of adverse effects can be serious or even fatal. An interval of at least 7 days after M.A.O.I. therapy has been discontinued should be allowed before this drug may be substituted. Initial dosage should be low, increases should be gradual, and the patient's progress should be carefully observed.
Warning: Clinical reports have suggested that there may be a risk of teratogenesis associated with the use of this compound during the first trimester of pregnancy. Unless, in the opinion of the prescribing physician, the potential benefits outweigh the possible risks, it should not be used during the first trimester of pregnancy. Cardiovascular complications, including myocardial infarction and arrhythmias, have occasionally occurred in susceptible individuals. Patients with cardiovascular disease should be given the drug only under careful observation and in low dosage.
Precautions: Since suicide is always a possibility in severely depressed patients and one which may persist until significant remission occurs, such patients should be carefully supervised during early treatment. Some severely depressed patients may also require hospitalization and/or concomitant electroconvulsive therapy. Because of its anticholinergic effect, caution should be observed in prescribing the drug for patients with increased intraocular pressure.
In rare instances, transient cardiac arrhythmias have occurred in hyperthyroid patients and in patients receiving thyroid medication when this compound was added to the regimen. Imipramine may block the pharmacologic activity of guanethidine and other related adrenergic neuron-blocking agents.
The drug is not recommended at the present time in patients under 12 years of age.
Adverse Reactions: Dryness of the mouth, tachycardia, constipation, disturbances of accommodation, sweating, dizziness, weight gain, urinary frequency or retention, nausea and vomiting, peripheral neuritis, mild parkinson-like syndrome, tremors, rare cases of falling in elderly patients, confusional states (with such symptoms as hallucinations and disorientation), activation of psychosis in schizophrenics and agitation (including hypomanic and manic episodes) which may require dosage reduction and/or addition of a tranquilizer or temporary discontinuation of the drug, epileptiform seizures, orthostatic hypotension and substantial blood pressure fall in hypertensive patients, purpura, transient jaundice, bone marrow depression including agranulocytosis, sensitization and skin rash including photosensitization, eosinophilia, and mild withdrawal symptoms on sudden discontinuation after prolonged treatment with high doses. Occasional hormonal effects (impotence, decreased libido, and estrogenic effects) may be observed. Atropine-like effects may be more pronounced (e.g. paralytic ileus) in susceptible patients and in those using anticholinergic agents (including antiparkinsonism drugs).
Outpatient Adult Dosage: Initially, 75 mg. daily, increased, if necessary, to 150 or 200 mg. Maintenance dosage may be lower, 50 to 150 mg. daily, if possible.
Geriatric and Adolescent Dosage: Initially, 30 or 40 mg. daily, which may be increased according to response and tolerance. It is usually unnecessary to exceed 100 mg. daily.
A lag in therapeutic response, lasting from a few days to a few weeks, should be expected. When dosage recommendations are already being followed, increasing the dosage does not normally shorten this latency period and may increase the incidence of adverse reactions.
Availability: Round tablets of 25 and 50 mg.; triangular tablets of 10 mg. for geriatric and adolescent use; and ampuls, each containing 25 mg. in 2 cc. for I.M. administration.
(B)R-46-850-C

For complete details, please refer to the full Prescribing Information.

Geigy Pharmaceuticals
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Contraindications: Dextro-amphetamine sulfate: In hyperexcitability and in agitated prepsychotic states. Previous allergic or idiosyncratic reactions to meprobamate.
Precautions: Use with caution in patients hypersensitive to sympathomimetic compounds, who have coronary or cardiovascular disease, or are severely hypertensive.

Dextro-amphetamine sulfate: Excessive use by unstable individuals may result in psychological dependence.

Meprobamate: Careful supervision of dose and amounts prescribed is advised, especially for patients with known propensity for taking excessive quantities of drugs. Excessive and prolonged use in susceptible persons, e.g. alcoholics, former addicts, and other severe psychoneurotics, has been reported to result in dependence on the drug. Where excessive dosage has continued for weeks or months, reduce dosage gradually. Sudden withdrawal may precipitate recurrence of preexisting symptoms such as anxiety, anorexia, or insomnia; or withdrawal reactions such as vomiting, ataxia, tremors, muscle twitching and, rarely, epileptiform seizures. Should meprobamate cause drowsiness or visual disturbances, reduce dosage and avoid operation of motor vehicles, machinery or other activity requiring alertness. Effects of excessive alcohol consumption may be increased by meprobamate. Appropriate caution is recommended with patients prone to excessive drinking. In patients prone to both petit and grand mal epilepsy meprobamate may precipitate grand mal attacks. Prescribe cautiously and in small quantities to patients with suicidal tendencies.
Side Effects: Overstimulation of the central nervous system, jitteriness and insomnia or drowsiness. Dextro-amphetamine sulfate: Insomnia, excitability, and increased motor activity are common and ordinarily mild side effects. Confusion, anxiety, aggressiveness, increased libido, and hallucinations have also been observed, especially in mentally ill patients. Rebound fatigue and depression may follow central stimulation. Other effects may include dry mouth, anorexia, nausea, vomiting, diarrhea, and increased cardiovascular reactivity.

Meprobamate: Drowsiness may occur and can be associated with ataxia; the symptom can usually be controlled by decreasing the dose, or by concomitant administration of central stimulants. Allergic or idiosyncratic reactions: maculopapular rash, acute nonthrombocytopenic purpura with petechiae, ecchymoses, peripheral edema and fever, transient leukopenia. A case of fatal bullous dermatitis, following administration of meprobamate and prednisolone, has been reported. Hypersensitivity has produced fever, fainting spells, angioneurotic edema, bronchial spasms, hypotensive crises (1 fatal case), anuria, stomatitis, proctitis (1 case), anaphylaxis, agranulocytosis and thrombocytopenic purpura, and a fatal instance of aplastic anemia, but only when other drugs known to elicit these conditions were given concomitantly. Fast EEG activity, usually after excessive dosage. Impairment of visual accommodation. Massive overdosage may produce drowsiness, lethargy, stupor, ataxia, coma, shock, vasomotor and respiratory collapse.

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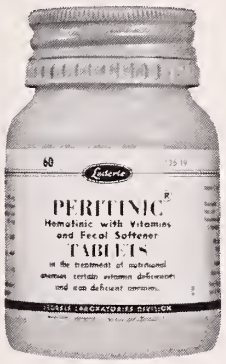
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* anticostive, *adj.* (*anti* opposed to + *costive* causing constipation.) Against constipation. Now isn't that a good idea in an iron-containing hematinic?

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Before prescribing, please consult complete product information, a summary of which follows:

Indications: Indicated when anxiety, tension and apprehension are significant components of the clinical profile.

Contraindications: Patients with known hypersensitivity to the drug.

Warnings: Caution patients about possible combined effects with alcohol and other CNS depressants. As with all CNS-acting drugs, caution patients against hazardous occupations requiring complete mental alertness (*e.g.*, operating machinery, driving).Though physical and psychological dependence have rarely been reported on recommended doses, use caution in administering to addiction-prone individuals or those who might increase dosage; withdrawal symptoms (including convulsions), following discontinuation of the drug and similar to those seen with barbiturates, have been reported. Use of any drug in pregnancy, lactation, or in women of childbearing age requires that its potential benefits be weighed against its possible hazards.

Precautions: In the elderly and debilitated, and in children over six, limit to smallest effective dosage (initially 10 mg or less per day) to preclude ataxia or oversedation, increasing gradually as needed and tolerated. Not recommended in children under six. Though generally not recommended, if combination therapy with other psychotropics seems indicated, carefully consider individual pharmacologic effects, particularly in use of potentiating drugs such as MAO inhibitors and phenothiazines. Observe usual precautions in presence of impaired renal or hepatic function. Paradoxical reactions (*e.g.*, excitement, stimulation and acute rage) have been reported in psychiatric patients and hyperactive aggressive children. Employ usual precautions in treatment of anxiety states with evidence of impending depression; suicidal tendencies may be present and protective measures necessary. Variable effects on blood coagulation have been reported very rarely in patients receiving the drug and oral anticoagulants; causal relationship has not been established clinically.

Adverse Reactions: Drowsiness, ataxia and confusion may occur, especially in the elderly and debilitated. These are reversible in most instances by proper dosage adjustment, but are also occasionally observed at the lower dosage ranges. In a few instances syncope has been reported. Also encountered are isolated instances of skin eruptions, edema, minor menstrual irregularities, nausea and constipation, extrapyramidal symptoms, increased and decreased libido—all infrequent and generally controlled with dosage reduction; changes in EEG patterns (low-voltage fast activity) may appear during and after treatment; blood dyscrasias (including agranulocytosis), jaundice and hepatic dysfunction have been reported occasionally, making periodic blood counts and liver function tests advisable during protracted therapy.

Usual Daily Dosage: Individualize for maximum beneficial effects. *Oral*—Adults: Mild and moderate anxiety and tension, 5 or 10 mg t.i.d. or q.i.d.; severe states, 20 or 25 mg t.i.d. or q.i.d. Geriatric patients: 5 mg b.i.d. to q.i.d. (See Precautions.)

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THE JOURNAL

OF THE KENTUCKY MEDICAL ASSOCIATION



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When she gets a bacterial infection, think of Tetrex-F.®

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(tetracycline phosphate complex-nystatin)

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PRESCRIBING INFORMATION. For complete information consult Official Package Circular. *Indications:* Infections of respiratory, gastrointestinal and genitourinary tracts and skin and soft tissues due to tetracycline-sensitive organisms, in patients with increased susceptibility to monilial infections. *Contraindications:* The drug is contraindicated in patients hypersensitive to its components. *Warnings:* Photodynamic reactions have been produced by tetracyclines. Natural and artificial sunlight should be avoided during therapy. Stop treatment if skin discomfort occurs. With renal impairment, systemic accumulation and hepatotoxicity may occur. In this situation, lower doses should be used. Tooth staining and enamel hypoplasia may be induced during tooth development (last trimester of pregnancy, neonatal period and childhood). *Precautions:* Bacterial superinfections may occur. Infants may develop increased intracranial pressure with bulging fontanels. In gonorrheal therapy, serologic tests for syphilis should be conducted initially and monthly for 3 months. *Adverse Reactions:* Glossitis, stomatitis, nausea, diarrhea, flatulence, proctitis, vaginitis, dermatitis, and allergic reactions may occur. *Usual Adult Dosage:* 1 capsule q.i.d. Continue for 10 days in Beta-hemolytic streptococcal infections. Administer one hour before or two hours after meals. *Supplied:* Capsules, bottles of 16 and 100. Each capsule contains tetracycline phosphate complex equivalent to 250 mg. tetracycline HCl activity and 250,000 units of nystatin. For Oral Suspension, 125 mg. tetracycline and 125,000 u. nystatin/5 ml., 60 ml. bottles. **A. H. F. S. Category 8:12**

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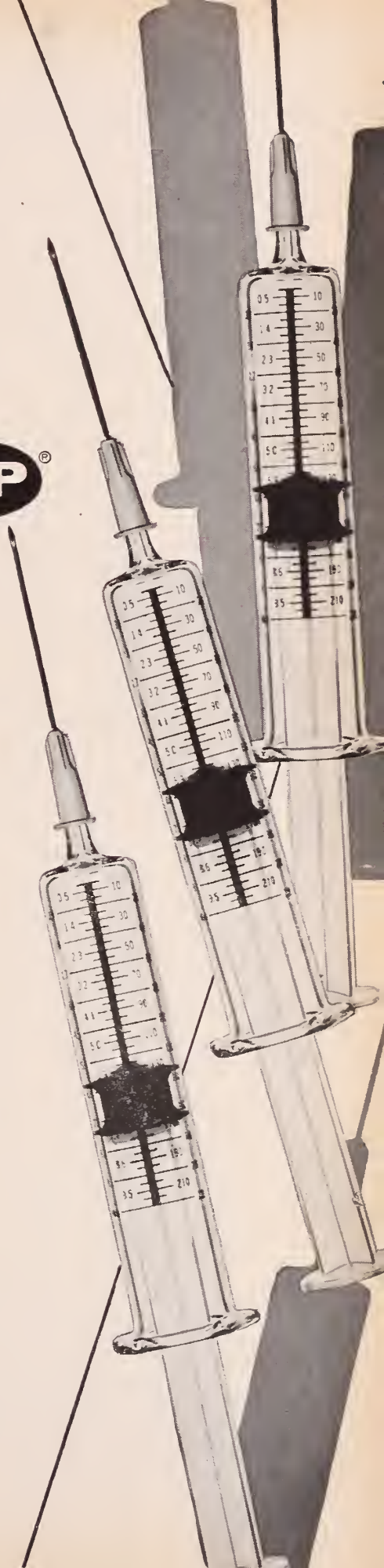
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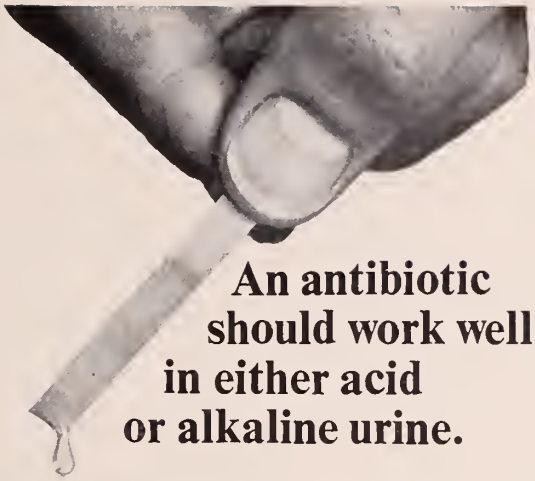
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An antibiotic should work well in either acid or alkaline urine.

It isn't always necessary to adjust urinary pH in treating G.U. infections.

Not when the causative organism is a strain sensitive to DECLOMYCIN® Demethylchlortetracycline, as is often the case.

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Effectiveness: DECLOMYCIN Demethylchlortetracycline should be equally or more effective therapeutically than other tetracyclines in infections caused by organisms sensitive to the tetracyclines.

Contraindication: History of hypersensitivity to demethylchlortetracycline.

Warning: In renal impairment, usual doses may lead to excessive accumulation and liver toxicity. Under such conditions, lower than usual doses are indicated, and, if therapy is prolonged, serum level determinations may be advisable. A photodynamic reaction to natural or artificial sunlight has been observed. Small amounts of drug and short exposure may produce an exaggerated sunburn reaction which may range from erythema to severe skin manifestations. In a smaller proportion, photoallergic reactions have been reported. Patients should avoid direct exposure to sunlight and discontinue drug at the first evidence of skin discomfort. Necessary subsequent courses of treatment with tetracyclines should be carefully observed.

Precautions: Overgrowth of nonsusceptible organisms may occur. Constant observation is essential. If new infections appear, appropriate measures should be taken. In infants, increased intracranial pressure with bulging fontanels has been observed. All signs and symptoms have disappeared rapidly upon cessation of treatment.

Side Effects: Gastrointestinal system — anorexia, nausea, vomiting, diarrhea, stomatitis, glossitis, enterocolitis, pruritus ani. Skin — maculopapular and erythematous rashes; a rare case of exfoliative dermatitis has been reported. Photosensitivity; onycholysis and discoloration of the nails (rare). Kidney — rise in BUN, apparently dose-related. Transient increase in urinary output, sometimes accompanied by thirst (rare). Hypersensitivity reactions—urticaria, angioneurotic edema, anaphylaxis. Teeth — dental staining (yellow-brown) in children of mothers given this drug during the latter half of pregnancy, and in children given the drug during the neonatal period, infancy and early childhood. Enamel hypoplasia has been seen in a few children. If adverse reaction or idiosyncrasy occurs, discontinue medication and institute appropriate therapy. Demethylchlortetracycline may form a stable calcium complex in any bone-forming tissue with no serious harmful effects reported thus far in humans.

Average Adult Daily Dosage: 150 mg q.i.d. or 300 mg b.i.d. Should be given 1 hour before or 2 hours after meals, since absorption is impaired by the concomitant administration of high calcium content drugs, foods and some dairy products. Treatment of streptococcal infections should continue for 10 days, even though symptoms have subsided.

Capsules: 150 mg; Tablets: film coated — 300 mg, 150 mg and 75 mg of demethylchlortetracycline HCl.

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Continuing Educational Opportunities

From The

KMA Postgraduate Medical Education Office

SEND IN MEETING INFORMATION

Many medical organizations are setting dates for their winter and spring meetings. At the same time they are choosing the topics to be discussed, arranging for speakers and planning programs.

The Continuing Medical Education office of the Kentucky Medical Association would like to urge these societies and organizations to notify this office of these dates and topics so they can be added to the "Continuing Education Opportunities" calendar in *The Journal*. In this way conflicts in dates can be avoided and a wider audience can be informed of these upcoming meetings.

Please send such information, when available, to the KMA Continuing Medical Education Office, 3532 Janet Avenue, Louisville, Ky. 40205.

IN KENTUCKY

JANUARY

15 Methodist Evangelical Hospital, Fourth Annual Postgraduate Day Symposium, "Clinical Disturbances in Electrolyte and Acid Base Metabolism," Louisville

FEBRUARY

24-26 Kentucky Chapter, American College of Surgeons Sectional Meeting, Brown Hotel, Louisville

MARCH

26-27 KMA INTERIM MEETING, "The Challenge We Face in 1969," Continental Inn, Lexington

IN SURROUNDING STATES

JANUARY

8-9 Cleveland Clinic Educational Foundation Postgraduate Course, "Advances in Neurology," Cleveland, Ohio

12-17 Society of Cryosurgery Annual Meeting, Hilton Plaza, Miami Beach, Fla.

15-16 Cleveland Clinic Educational Foundation Postgraduate Course, "Surgical Problems of the Liver, Biliary System, Pancreas and Spleen," Cleveland, Ohio

20-21 Cleveland Clinic Educational Foundation Postgraduate Course, "Cardiovascular and Renal Clinical Pharmacology," Cleveland, Ohio

20-Feb. 28 Six-Week Seminar, "Educational Science for Medical Teachers," Division of Regional Medical Programs, Dept. of HEW, University of Illinois College of Medicine, Chicago, Ill.

22 University of Cincinnati College of Medicine Symposium, "Man and the Value of Life," Cincinnati, Ohio

MARCH

25-28 Center for the Study of Medical Education Workshop, "Instructional Skills for the Medical Teacher", University of Illinois College of Medicine, Chicago, Ill.

The muscle relaxant that works before you write a prescription

Relieve painful skeletal muscle spasm in your office in minutes with a single 2 cc. injection of NORFLEX. Then, for sustained relief, write a prescription for NORFLEX tablets, 1 tablet b.i.d.

CONTRAINDICATIONS: Due to its anticholinergic action, NORFLEX should not be used in patients with glaucoma, pyloric or duodenal obstruction, stenosing peptic ulcer, prostatic hypertrophy or obstruction at the bladder neck, cardiospasm (megaesophagus) and myasthenia gravis. Use with caution in patients with tachycardia. Do not use propoxyphene (Darvon®) concurrently.

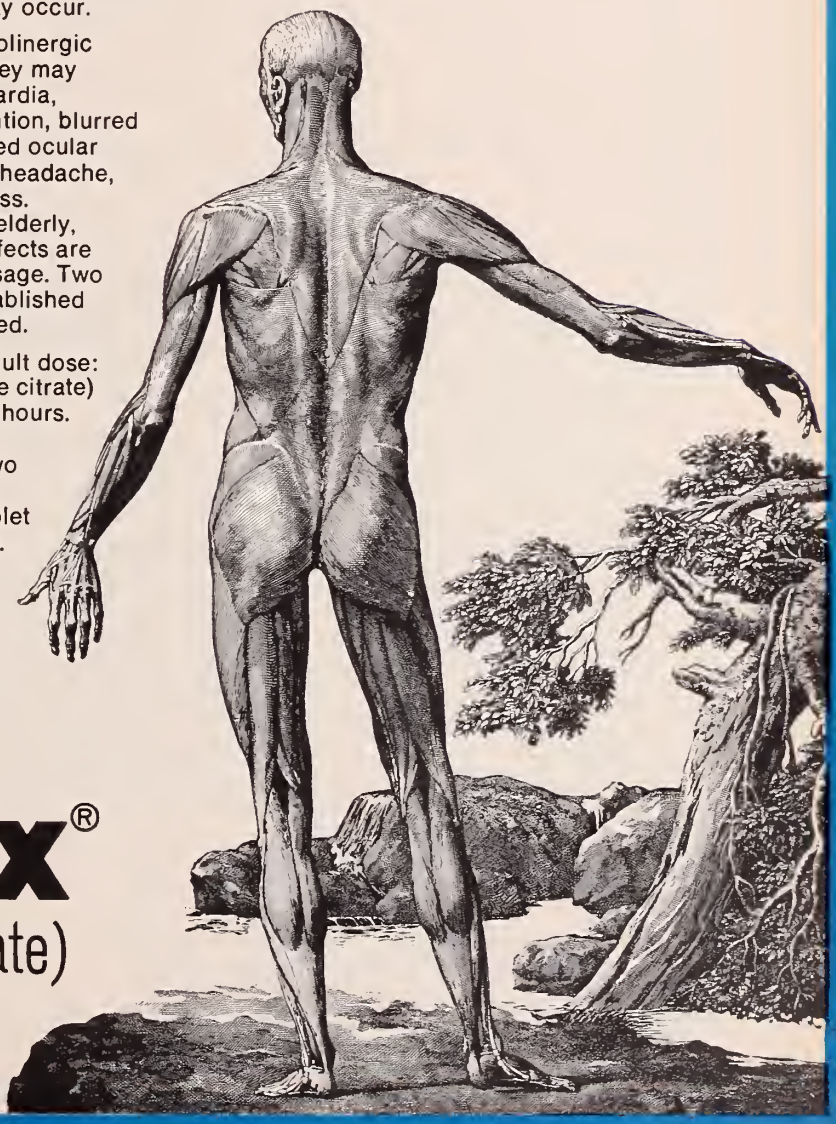
WARNING: Transient lightheadedness or dizziness following NORFLEX-INJECTABLE may occur.

SIDE EFFECTS: Due mainly to anticholinergic action and usually at high dosage. They may include dryness of the mouth, tachycardia, palpitation, urinary hesitancy or retention, blurred vision, dilatation of the pupil, increased ocular tension, weakness, nausea, vomiting, headache, dizziness, constipation, and drowsiness. Infrequently, mental confusion in the elderly, urticaria or other dermatoses. Side effects are usually eliminated by reduction in dosage. Two cases of aplastic anemia, with no established causal relationship, have been reported.

DOSAGE: **INJECTABLE** — Average adult dose: one ampul, 2 cc. (60 mg. orphenadrine citrate) I.M. or I.V. May be repeated every 12 hours. Relief may be maintained with one NORFLEX tablet b.i.d. **TABLETS** — Two tablets per day for adults, one in the morning, one in the evening. Each tablet contains 100 mg. orphenadrine citrate.

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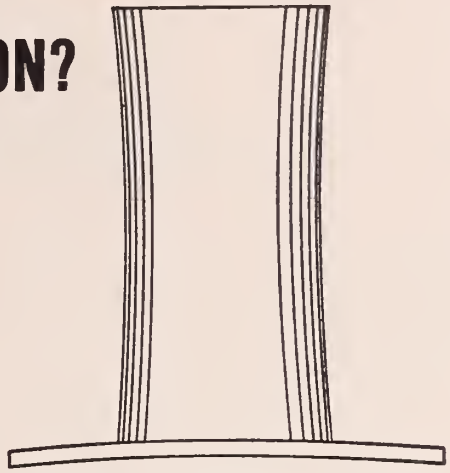
MESSAGE FROM THE PRESIDENT

At His Season, when we celebrate the birth of Christ, let us join in beseeching the Almighty to give strength and wisdom to the new leadership in our country in the search for peace at home and abroad.

The Officers and Staff of KMA join me in extending best wishes for a Merry Christmas and a Happy New Year.

Henry B. Asman

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*DEDICATION**

THERE are men and classes of men that stand above the common herd: the soldier, the sailor, and the shepherd not unfrequently; the artist rarely; rarelier still, the clergyman; the physician almost as a rule. He is the flower (such as it is) of our civilization; and when that stage of man is done with, and only remembered to be marvelled at in history, he will be thought to have shared as little as any in the defects of the period, and most notably exhibited the virtues of the race. Generosity he has, such as is possible to those who practise an art, never to those who drive a trade; discretion, tested by a hundred secrets; tact, tried in a thousand embarrassments; and what are more important, Heraclean cheerfulness and courage. So it is that he brings air and cheer into the sick-room, and often enough, though not so often as he wishes, brings healing.

Gratitude is but a lame sentiment; thanks, when they are expressed, are often more embarrassing than welcome; and yet I must set forth mine to a few out of many doctors who have brought me comfort and help; to Dr. Willey of San Francisco, whose kindness to a stranger it must be as grateful to him, as it is touching to me, to remember; to Dr.Karl Ruedi of Davos, the good genius of the English in his frosty mountains; to Dr. Herbert of Paris, whom I knew only for a week, and to Dr. Caissot of Montpellier, whom I knew only for ten days, and who have yet written their names deeply in my memory; to Dr. Brandt of Royat; to Dr. Wakefield of Nice; to Dr. Chepnell, whose visits make it a pleasure to be ill; to Dr. Horace Dobell, so wise in counsel; to Sir Andrew Clark, so unwearied in kindness; and to that wise youth, my uncle, Dr. Balfour.

I forget as many as I remember; and I ask both to pardon me, these for silence, those for inadequate speech. But one name I have kept on purpose to the last, because it is a household word with me, and because if I had not received favors from so many hands and in so many quarters of the world, it should have stood upon this page alone: that of my friend Thomas Bodley Scott of Bournemouth. Will he accept this, although shared among so many, for a dedication to himself? and when next my ill-fortune (which has thus its pleasant side) brings him hurrying to me when he would fain sit down to meat or lie down to rest, will he care to remember that he takes this trouble for one who is not fool enough to be ungrateful?

SKERRYVORE,
BOURNEMOUTH.

ROBERT LOUIS STEVENSON
1850-1894

**This tribute is printed in memory of the 60 Kentucky physicians who died during the past year. The complete list appears on the following page.*

Deceased Kentucky Physicians

1968*

Joseph Spalding Abell, Louisville
John Raymond Aker, Grayson
Arthur M. Barnett, Louisville
Benjamin S. Bell, Lexington
Woodford B. Bishop, Grayson
Everett D. Blair, Morehead
Benjamin Jackson Bolin, Columbia
Max Bornstein, Louisville
Ralph Edwin Cardwell, Providence
Shelby Gibson Carr, Richmond
William Hershell Cave, Henderson
Oscar Louis Cawood, Harlan
John S. Cisco, Salyersville
John Lawson Clay, Morehead
John R. Corum, Madisonville
Randolph Dade, Hopkinsville
Daniel Fortune, Olive Hill
Russell G. Frazier, Salt Lake City, Utah
Clyde Louis Carr, Flemingsburg
George Hicks Gregory, Versailles
Charles P. Harrod, Palo Alto, Calif.
Henry Clay Hays, Athens, W. Va.
Joseph D. Heitger, Louisville
J. H. Hester, New Smyrna Beach, Fla.
John Coburn Hill, Louisville
Garfield Howard, Crab Orchard
William Clyde Huffman, Iowa City, Iowa
William Frederick Jamison, Neptune, N. J.
Victor Jenkins, Hopkinsville
William Henry V. Jones, Louisville
Griffen C. Kelly, Louisville
J. Allen Kirk, Louisville
Joseph Henry Kurre, Owensboro
Willard Lake, Hartford
William Curry Martin, Louisville
Charles Harrison McChord, Lexington
Edward Allen McEver, Williamsburg
Clive Arthur Moss, Williamsburg
Chapman S. Moorman, Louisville
Louis Nagel, Louisville
Marion Wesley Page, Sikeston, Mo.
Leonard R. Pauly, Ft. Wayne, Ind.
John R. Peters, Glendale, Calif.
Barton L. Ramsey, Jr., Somerset
William E. Render, Louisville
Harry N. Ritter, Louisville
B. F. Robinson, Ft. Lauderdale, Fla.
John J. Rolf, Covington
Roy Sanders, Dorton
Emory Lee Shiflett, Louisville
Augustus Darwin Slone, Paintsville
Alfred Frank Smith, Georgetown
Roy Glenwood Spurling, LaJolla, Calif.
Henry H. Sweets, Jr., Hannibal, Mo.
Neil Edison Taylor, Ft. Thomas
Alfred James Treherne, New Orleans, La.
Manfred Graf von Linde, New York City
Stewart C. Way, Palo Alto, Calif.
Logan Mitchell Weaver, Bowling Green
Earl Patrick Wright, Pikeville

**List of names of deceased physicians available to The Journal as of November 15, 1968.*



Summation:
In addition to its primary indications for duodenal and gastric ulcer, Robinul Forte (glycopyrrolate) is indicated for other G-I conditions that may benefit from anticholinergic therapy. Robinul-PH Forte (glycopyrrolate 2 mg. with phenobarbital) is indicated when these situations are complicated by mild anxiety and tension.

Contraindications: Glaucoma, urinary bladder neck obstruction, pyloric obstruction, stenosis with significant gastric retention, prostatic hypertrophy, duodenal obstruction, cardiospasm (megaesophagus), and achalasia of the esophagus, and in the case of Robinul-PH Forte, sensitivity to phenobarbital.

Precautions: Administer with caution in the presence of incipient glaucoma.

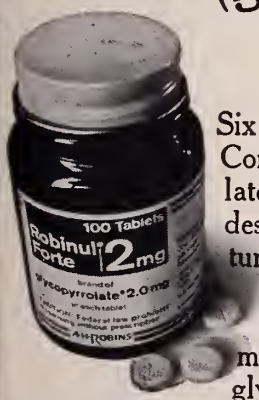
Adverse Reactions: Dryness of the mouth, blurred vision, urinary difficulties, and constipation are rarely troublesome and may generally be controlled by reduction of dosage. Other side effects associated with the use of anticholinergic drugs include tachycardia, palpitation, dilatation of the pupil, increased ocular tension, weakness, nausea, vomiting, headache, dizziness, drowsiness, and rash.

Dosage: Should be adjusted according to individual patient response. Average and maximum recommended dose is 1 tablet three times a day; in the a.m., early p.m., and at bedtime. See product literature for full prescribing information.

Supply: Robinul (glycopyrrolate 1 mg.): Robinul Forte (glycopyrrolate 2 mg.): Robinul-PH (glycopyrrolate 1 mg.) with phenobarbital 16.2 mg. (Warning: may be habit forming); Robinul-PH Forte (glycopyrrolate 2 mg.) with phenobarbital 16.2 mg. (Warning: may be habit forming), in bottles of 100 and 500 tablets. A. H. Robins Company, Richmond, Va. 23220.

A·H·ROBINS

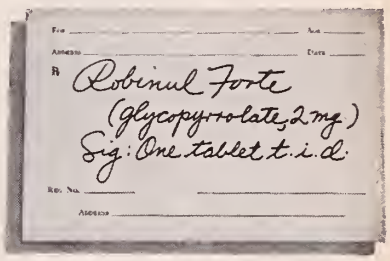
In peptic ulcer therapy, won't you give Robinul® Forte a Fair Trial?
(glycopyrrolate)



Six years ago the A. H. Robins Company introduced glycopyrrolate, a unique anticholinergic agent described in the prescribing literature as more closely approaching the ideal compound for controlling gastric hyperacidity and hypermotility of the G-I tract. Although glycopyrrolate (Robinul Forte) found good acceptance among numerous physicians, many others just didn't seem to want to give it a try, probably because the anticholinergic they were already using was giving acceptable results.

However, we believe you'll agree there's always room for a better anticholinergic. This is why we're asking you to give Robinul Forte a fair trial. Robinul Forte exerts a highly specific antisecretory action and marked inhibitory effect on intestinal tone. We're convinced you'll agree that this is indeed an outstanding drug when you observe its outstanding suppression of ulcer symptoms. Furthermore, it is unique in that it reduces intestinal tone, yet has little or no effect on peristalsis. In addition, the incidence of the more bothersome peripheral side effects is low.

No longer does the physician have to look for extreme dry mouth as the measure of his anticholinergic's effectiveness. The only way we can demonstrate to you firsthand the efficacy of glycopyrrolate (Robinul Forte) is for you to try it in your practice. That's why we're asking you to give it a Fair Trial. How can you give it a Fair Trial? You do it this way:



First: When you see your very next ulcer patient, write him a script as shown.

Next: Wait 10 days or until your patient comes in for his next appointment and get his "verdict" as to how he feels. Examine all the evidence and make your evaluation of his condition.



Finally: Render **your** verdict. If it's "significant improvement and marked relief of symptoms," then we believe you'll agree that Robinul Forte has proved its worth, and we rest our case. If not, consider our case for Robinul Forte closed. That's a Fair Trial, Doctor, and it's all we ask.

Robinul® Forte
(glycopyrrolate, 2 mg.)

The summation is an important part of every case. You'll find ours on the preceding page, Doctor.


Knee-deep

in osteoarthritic pain

If aspirin doesn't help, move in with Tandearil.

The trial period is brief: 1 week. Try one tablet q.i.d. at first. Tandearil usually starts working within 3 to 4 days. When response occurs, as little as 1 or 2 tablets daily may hold back pain and stiffness, and increase joint motion.

On the next page is a summary of adverse reactions, contraindications, warning and precautions.

Tandearil.
It can help get his mind off his knee.

Please review full Prescribing Information carefully before prescribing.

For osteoarthritic knees, spines, shoulders, hips, etc.:

Tandearil®
oxyphenbutazone

Tandearil, oxyphenbutazone:
For brief summary see next page.

Geigy

TA-6006



Tandearil®
oxyphenbutazone

Contraindications: Edema; danger of cardiac decompensation; history or symptoms of peptic ulcer; renal, hepatic or cardiac damage; history of drug allergy; history of blood dyscrasia. The drug should not be given when the patient is senile or when other potent drugs are given concurrently.

Warning: This drug is an analog of phenylbutazone; sensitive patients may be cross-reactive. If coumarin-type anticoagulants are given simultaneously, watch for excessive increase in prothrombin time. Instances of severe bleeding have occurred. Persistent or severe dyspepsia may indicate peptic ulcer; perform upper gastrointestinal x-ray diagnostic tests if drug is continued. Pyrazole compounds may potentiate the pharmacologic action of sulfonylurea, sulfonamide-type agents and insulin. Carefully observe patients receiving such therapy. Use with caution in the first trimester of pregnancy, and in patients with thyroid disease.

Precautions: Before prescribing, carefully select patients, avoiding those responsive to routine measures as well as contraindicated patients. Obtain a detailed history and a complete physical and laboratory examination, including a blood count. The patients should not exceed recommended dosage, should be closely supervised and should be warned to discontinue the drug and report immediately if fever, sore throat, or mouth lesions (symptoms of blood dyscrasia), sudden weight gain (water retention), skin reactions, black or tarry stools or other evidence of intestinal hemorrhage occur. Make complete blood counts at weekly intervals during early therapy and at 2-week intervals thereafter. Discontinue the drug immediately and institute countermeasures if the white count changes significantly, granulocytes decrease, or immature forms appear. Use greater care in the elderly and in hypertensives.

Adverse Reactions: The more common are nausea and edema. Swelling of the ankles or face may be minimized by withholding dietary salt, reduction in dosage or use of diuretics. In elderly patients and in those with hypertension, the drug should be discontinued with the appearance of edema. The drug has been associated with peptic ulcer and may reactivate a latent peptic ulcer. The patient should be instructed to take doses immediately after meals or with milk to minimize gastric upset. Drug rash occasionally occurs. If it does, promptly discontinue the drug. Agranulocytosis, exfoliative dermatitis, Stevens-Johnson syndrome, Lyell's syndrome (toxic necrotizing epidermolysis), or a generalized allergic reaction similar to a serum sickness syndrome may occur and require permanent withdrawal of medication. Agranulocytosis can occur suddenly in spite of regular, repeated normal white counts. Stomatitis, salivary gland enlargement, vomiting, vertigo and languor may occur. Leukemia and leukemoid reactions have been reported. While not definitely attributable to the drug, a causal relationship cannot be excluded. Thrombocytopenic purpura and aplastic anemia may occur. Confusional states, agitation, headache, blurred vision, optic neuritis and transient hearing loss have been reported, as have hyperglycemia, hepatitis, jaundice, hypersensitivity angiitis, pericarditis and several cases of anuria and hematuria. With long-term use, reversible thyroid hyperplasia may occur infrequently. Moderate lowering of the red cell count due to hemodilution may occur.

Dosage in Osteoarthritis: Initial: 3 to 6 tablets daily in divided doses. Usually unnecessary to exceed 4 tablets daily. A trial period of one week is considered adequate to determine the therapeutic effect of the drug. Maintenance: Effective level often achieved with 1 or 2 tablets daily, should not exceed 4 tablets daily.

In selecting appropriate dosage in any specific case, consideration should be given to the patient's weight, general health, age and any other factors influencing drug response.

Availability: Tan, round, sugar-coated tablets of 100 mg. in bottles of 100 and 1000.

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For complete details, please see full Prescribing Information.

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From the files of the

COMMITTEE FOR THE

STUDY OF MATERNAL MORTALITY

CASE 9-67. This 24 year old married, white gravida 2, para 1, was under the care of a private physician whom she consulted during the third month of pregnancy. Her last known menstrual period had begun on October 15, 1966, so that the expected date of delivery was July 22, 1967. A summary of her prenatal care showed the following:

	February	March	April 19
B.P.	110/70	110/70	110/70
Wt.	149½	152	162½

	April 28	May 15	May 29	June 12
B.P.	110/70	120/60	110/60	120/80
Wt.	167½	167	165	170

VDRL was non-reactive. Hb was 12.2

The patient was admitted at 11:30 p.m. on June 14 complaining of abdominal pain that had begun suddenly about 9:30 p.m. and had remained more or less constant. Examination showed that she was not in labor. Her blood pressure was 140/76, pulse 84; the fetal heart beat was counted at 128 and the cervix was closed. She was given a sedative for pain.

On the following morning at 8:00 a.m. the blood pressure was 140/70, pulse 120, and the lungs were clear; however, she could not lie down because of the pain. The fetal heart rate was 148. There was no localized rigidity and the findings on vaginal examination were as before. A blood count on June 15 showed a hemoglobin of 13.8 gm., hematocrit 41%, WBC 11,600 with 82 segs, 15 lymphs, 3 stabs. A catheterized urine was negative for sugar and albumin, and showed 6-8 WBC and 10-12 RBC. A general surgeon was called in consultation and recommended cesarean section.

Under spinal anethesia (8 mg Pontocaine) a midline incision was made extending above the umbilicus. Bloody purulent fluid was encountered immediately when the peritoneal cavity was opened. Both the small and large bowel showed dusky discoloration. The stomach and first part of the duodenum appeared normal, as did the descending colon. A cesarean section was performed with delivery of a living premature infant, and the uterus was closed in two layers.

A massive volvulus was present; this was reduced, and the bowel showed some return of color. Since it was considered impossible to resect the entire small bowel starting at the second portion of the duodenum, it was hoped the return of viability would be adequate. Deflation of the distended right colon was carried out by suction through a purse string and the defect was closed by an additional purse string suture.

The patient's status was amazingly good considering the condition of the bowel, but toward the end of the procedure her blood pressure was markedly depressed. The abdomen was closed with through and through sutures, and two large tissue drains were brought out the lower end of the incision. She received 500 cc of blood during the procedure. The patient's general appearance was described as "fair", but her prognosis was considered extremely grave. She became anuric and hypotensive, and she died at 11:30 p.m., some 12 hours after the section.

The final diagnosis was listed as uterine pregnancy, 34 weeks, and massive mesenteric thrombosis due to volvulus of the mesentery.

Comments

This was considered an indirect obstetric death without preventable features. Volvulus accounts for between 15 and 25% of all intestinal obstructions during pregnancy, and over one-half of the cases are encountered in the third trimester. The left side of the colon is most commonly affected, the small intestine being involved only rarely. In reported cases, cesarean section was necessary in one-third of the cases as a preliminary for adequate exposure.

In the complex picture of moderate to severe anxiety...



there is a new reason for prescribing Mellaril (Thioridazine HCl)

effectiveness in mixed anxiety-depression

Long recognized for its usefulness in the treatment of moderate to severe anxiety, Mellaril is now also known to be effective against mixed anxiety-depression.

Often the symptoms of anxiety states are difficult to sort out—even with the most careful probing. The patient may manifest symptoms of agitation, restlessness, insomnia, somatic complaints. But what of the depression that may be mixed in the total picture? It is reassuring to know that Mellaril may be prescribed—with strong possibilities of success—when there is anxiety alone or a mixture of anxiety and depression.

Before prescribing or administering, see Sandoz literature for full product information, including adverse reactions reported with phenothiazines. The following is a brief precautionary statement.

Contraindications: Severe central nervous system depression, comatose states from any cause, hypertensive or hypotensive heart disease of extreme degree.

Warnings: Administer cautiously to patients who have previously exhibited a hypersensitivity reaction (e.g., blood dyscrasias, jaundice) to phenothiazines. Phenothiazines are capable of potentiating central nervous system depressants (e.g., anesthetics, opiates, alcohol, etc.) as well as atropine and phosphorus insecticides. During pregnancy, administer only when necessary.

Precautions: There have been infrequent reports of leukopenia and/or agranulocytosis and convulsive seizures. In epileptic patients, anticonvulsant medication should also be maintained. Pigmentary retinopathy may be avoided by remaining within the recommended limits of dosage. Administer cautiously to patients participating in activities requiring complete mental alertness (e.g., driving). Orthostatic hypotension is more common in females than in males. Do not use epinephrine in treating drug-induced hypotension. Daily doses in excess of 300 mg. should be used only in severe neuropsychiatric conditions.

Adverse Reactions: *Central Nervous System*—Drowsiness, especially with large doses, early in treatment; infrequently, pseudoparkinsonism and other extrapyramidal symptoms; nocturnal confusion, hyperactivity, lethargy, psychotic reactions, restlessness, and headache. *Autonomic Nervous System*—Dryness of mouth, blurred vision, constipation, nausea, vomiting, diarrhea, nasal stuffiness, and pallor. *Endocrine System*—Galactorrhea, breast engorgement, amenorrhea, inhibition of ejaculation, and peripheral edema. *Skin*—Dermatitis and skin eruptions of the urticarial type, photosensitivity. *Cardiovascular System*—Changes in the terminal portion of the electrocardiogram have been observed in some patients receiving the phenothiazine tranquilizers, including Mellaril (thioridazine hydrochloride). While there is no evidence at present that these changes are in any way precursors of any significant disturbance of cardiac rhythm, several sudden and unexpected deaths apparently due to cardiac arrest have occurred in patients previously showing electrocardiographic changes. The use of periodic electrocardiograms has been proposed but would appear to be of questionable value as a predictive device. *Other*—A single case described as parotid swelling.

Mellaril®
(Thioridazine HCl) 25 mg. t.i.d.

for moderate to severe anxiety and mixed anxiety-depression

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Vitamin C	200 mg
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Bottles of 60

*anticostive, *adj.* (*anti* opposed to + *costive* causing constipation.) Against constipation. Now isn't that a good idea in an iron-containing hematinic?

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TAO®(triacetyloleandomycin)

Brief Summary

INDICATIONS: Include staphylococci, streptococci, pneumococci and gonococci. Recommended for acute, severe infections where adequate sensitivity testing has demonstrated susceptibility to this antibiotic and resistance to less toxic agents.

CONTRAINDICATIONS: Contraindicated in pre-existing liver disease or dysfunction, and in individuals hypersensitive to the drug.

PRECAUTIONS: CAUTION: USE OF THIS DRUG MAY PRODUCE ALTERATIONS IN LIVER FUNCTION TESTS AND JAUNDICE. CLINICAL EXPERIENCE AVAILABLE THUS FAR INDICATES THAT THESE LIVER CHANGES WERE REVERSIBLE FOLLOWING DISCONTINUATION OF THE DRUG.

Not recommended for prophylaxis or in the treatment of infectious processes, which may require more than ten days continuous therapy. In view of the possible hepatotoxicity of this drug when therapy beyond ten days proves necessary, other less toxic agents should be used. If clinical judgment dictates continuation of therapy for longer periods, serial monitoring of liver profile is recommended, and the drug should be discontinued at the first evidence of any form of liver abnormality. When treating gonorrhea in which lesions of primary or secondary syphilis are suspected, proper diagnostic procedures, including dark-field examinations, should be followed. In other cases in which concomitant syphilis is suspected, monthly serological tests should be made for at least four months. When used in streptococcal infections, therapy should be continued for ten days to prevent the development of rheumatic fever or glomerulonephritis. The use of antibiotics may occasionally permit overgrowth of nonsusceptible organisms. A resistant infection or superinfection requires re-evaluation of the patient's therapy. In the event such occurs with this drug the medication should be discontinued, and specific antibacterial and supportive therapy instituted.

ADVERSE REACTIONS: Although reactions of an allergic nature are infrequent and seldom severe, those of the anaphylactoid type have occurred on rare occasions.

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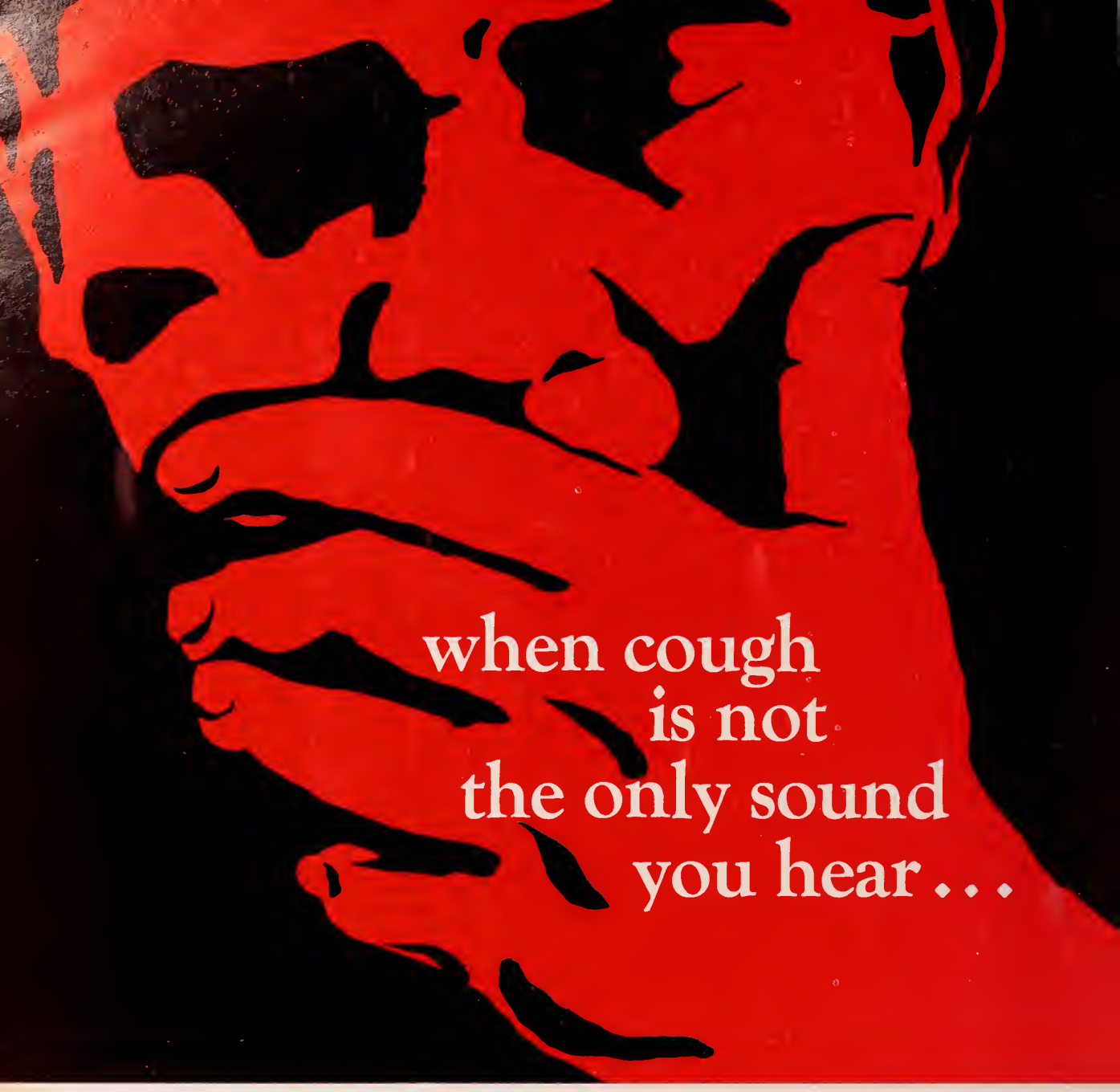
# OF CULTURES	YEAR	% EFFECTIVE
6,723	1962	88.6%
5,435	1963	88.0%
10,384	1964	88.5%

References: 1 Fowler, J. Ralph et al Clinical Medicine 70 547 (Mar.) 1963 2 Isenberg, Henry D Health Laboratory Science 1 185-256 (July-Aug. 1964) 3 Isenberg, Henry D Health Laboratory Science 2 163-173 (July) 1965

TAO® (triacetyl-oleandomycin)

is a macrolide antibiotic, for use only in the treatment of acute severe infections where adequate sensitivity testing has demonstrated susceptibility to this antibiotic and resistance to other less toxic agents.





OMNI-TUSS® b.i.d.

. . . **because** OMNI-TUSS is indicated for cough associated with upper respiratory tract infections, bronchitis, bronchiectasis, bronchial asthma, emphysema, sinusitis and rhinitis, hay fever, or other allergic conditions. Any of these conditions may exhibit the general symptom syndrome—coughing, wheezing, bronchospasm, and tenacious mucus—which may benefit from the antitussive, bronchodilative, antihistaminic, and expectorant action of Omni-Tuss.

The therapeutic usefulness of Omni-Tuss is enhanced by a unique resin complex formulation providing the clinically desirable advantages of: (1) uniform drug availability throughout an extended period, (2) 8 to 12 hours of symptomatic control, (3) minimal dosage requirement, (4) minimal side effects.

Economical, efficient **b.i.d.** dosage—extremely well-tolerated by children, 6-12, and adults.

'Omni Tuss' Suspension: Each teaspoonful (5 cc.) contains 10 mg. codeine (Warning: May be habit-forming), 5 mg. phenyltoloxamine, 3 mg. chlorpheniramine, 25 mg. ephedrine, all as cation exchange resin complexes of sulfonated polystyrene, and 20 mg. guaiacol carbonate.

Available on prescription only. Class X exempt narcotic. Permissible on oral prescription.

Dosage: *Adults:* 1 teaspoonful (5 cc.) q12h.
Children (6-12 *years*): ½ teaspoonful q12h.

Side Effects: Minimal, but when encountered may include jitteriness, nausea, drying of mouth, insomnia, constipation, which disappear upon adjustment of the dose or discontinuance of treatment.

Precautions and Contraindications: For complete detailed information, refer to package insert or official brochure.

Strasenburgh

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THE INSURANCE PAGE



Usual and Customary

WE are aware that the public is asking for and in some instances demanding paid-in-full medical programs.

The American Medical Association has previously endorsed the concept of payment of physicians' fees by pre-payment organizations and third parties on a Usual and Customary basis.

At the recent Kentucky Medical Association Annual Meeting our House of Delegates reaffirmed its support of this principle and approved a mechanism of local Peer Review for cases that cannot be routinely processed.

Kentucky Blue Shield in its desire to meet the needs and demands of the public agreed to develop such a program and called upon the Kentucky Medical Association to assist in the development of the necessary guidelines for its administration. Through a cooperative effort, the Kentucky Medical Association—Blue Shield Confidential Fee Survey was conducted. From this survey data was gathered and statistical guidelines were developed that enabled Blue Shield to process claims under the Usual and Customary Program. Blue Shield's Program provides flexibility and is so defined that these guidelines are continuously revised as physicians' fees change.

However, there is no mechanism that can guarantee a physician that his charge will always be paid in full. There must be some system that provides for handling those cases that exceed a maximum beyond which they cannot be processed routinely.

To provide for the handling of these cases the KMA Resolution urges county medical societies having 20 or more active physician members to establish a review committee, and invites county societies having from 10 to 20 members to establish their own local review committees. For those counties too small to have local review, a KMA Claims Review Committee has been appointed to serve as a review mechanism. This committee will also serve in an advisory capacity to Blue Shield and third parties in the administration of their Usual and Customary programs.

Both the American Medical Association and the Kentucky Medical Association have endorsed the Usual and Customary concept, and the support of each individual physician is vital to the success of a Usual and Customary program in Kentucky. It is evident that Blue Shield with its unique relationship to physicians should be organized medicine's instrument for providing a paid-in-full program for our people.

WILLIAM W. HALL, M.D.

It's almost as if you were there to give an injection of penicillin



V-Cillin K®, Pediatric dependable oral penicillin therapy

Potassium Phenoxymethyl Penicillin

Description: V-Cillin K, the potassium salt of V-Cillin® (phenoxymethyl penicillin, Lilly), combines acid stability with immediate solubility and rapid absorption. Higher, more rapid serum levels are obtained than with equal oral doses of penicillin G.

Indications: Streptococcus, pneumococcus, and gonococcus infections; infections caused by sensitive strains of staphylococci; prophylaxis of streptococcus infections in patients with a history of rheumatic fever; and prevention of bacterial endocarditis after tonsillectomy and tooth extraction in patients with a history of rheumatic fever or congenital heart disease.

Contraindication: Penicillin hypersensitivity.

Warnings: In rare instances, penicillin may cause acute anaphylaxis which may prove fatal unless promptly controlled. This type of reaction appears more frequently in patients with a history of sensitivity reactions to penicillin or with bronchial asthma or other allergies. Resuscitative drugs should be readily available. These include epinephrine and pressor drugs (as well as oxygen for inhalation) for immediate allergic manifestations and antihistamines and corticosteroids for delayed effects.

Precautions: Use cautiously, if at all, in a patient with a strongly positive history of allergy.

In prolonged therapy with penicillin, and particularly with high parenteral dosage schedules, frequent evaluation of the renal and hematopoletic systems is recommended.

In suspected staphylococcus infections, proper laboratory studies (including sensitivity tests) should be performed.

The use of penicillin may be associated with the overgrowth of penicillin-insensitive organisms. In such cases, discontinue administration and take appropriate measures.

Adverse Reactions: Although serious allergic reactions are much less common with oral penicillin than with intramuscular forms, manifestations of penicillin allergy may occur.

Penicillin is a substance of low toxicity, but it possesses a significant index of sensitization. The following hypersensitivity reactions have been reported: skin rashes ranging from maculopapular eruptions to exfoliative dermatitis; urticaria; and reactions resembling serum sickness, including chills, fever, edema, arthralgia, and prostration. Severe and often fatal anaphylaxis has occurred (see Warnings). Hemolytic anemia, leukopenia, thrombocytopenia, and nephropathy are rarely observed side-effects and are usually associated with high parenteral dosage.

Administration and Dosage: Usual dosage range, 125 mg. (200,000 units) three times a day to 500 mg. (800,000 units) every four hours. For infants, 50 mg. per Kg. per day divided into three doses.

See package literature for detailed dosage instructions for prophylaxis of streptococcus infections, surgery, gonorrhea, and severe infections.

How Supplied: Tablets V-Cillin K® (Potassium Phenoxymethyl Penicillin Tablets, U.S.P.), 125 mg. (200,000 units), 250 mg. (400,000 units), and 500 mg. (800,000 units).

V-Cillin K® (potassium phenoxymethyl penicillin, Lilly), Pediatric, for Oral Solution, 125 mg. (200,000 units) and 250 mg. (400,000 units) per 5 cc. of solution (approximately one teaspoonful). [042567A] 800198

Additional information available to physicians upon request.

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Management of the Patient "Overcome by Smoke"†

Donald M. Thomas, M.D.* and Eugene H. Conner, M.D.
Louisville, Kentucky

All patients "overcome by smoke" are not victims of asphyxia, but may be suffering from the effects of toxic gases, the ingestion of particulate smoke, and the effects of heat and hyperventilation. Oxygen therapy alone is often inadequate treatment.

NEWSPAPER accounts of major fires almost invariably tell of a number of firemen "overcome by smoke" and taken to hospitals for treatment. A survey based on newspaper accounts, conducted by the International Association of Fire Chiefs, indicates that 320 firefighters were victims of "smoke inhalation" during the first three months of 1967. Thirteen required hospitalization and three died.[1] In addition to these individuals, an unknown number of civilian fire victims suffer similar injuries.

The labels "overcome by smoke" or "victim of smoke inhalation" are generally applied to anyone who collapses or becomes unconscious at the scene of a fire or develops respiratory symptoms following exposure to smoke. These individuals have usually been considered to be suffering from asphyxia, and the standard practice of both first aiders and physicians in such cases has been the administration of oxygen by inhalation if the patient is breathing spontaneously, or by some type of mechanical ventilation if spontaneous respiration is absent or depressed. This approach is fine when the patient is indeed asphyxiated, but the physician should remember that many patients "overcome by smoke" are not asphyxiated, but are incapacitated by conditions in which oxygen deficiency does not play a primary part.

The Nature of Smoke

Before considering further the many factors which may cause an individual to be "overcome by smoke" some discussion of the nature and composition of fire smoke is in order.

Visible smoke produced by the burning of common organic materials such as wood, cotton, and paper is a suspension of carbon particles in air, mixed with volatilized products of combustion, gases, and often steam. As this mixture cools, some of the combustion products condense on the carbon particles which come to contain a number of complex organic acids and aldehydes and give the smoke its characteristic irritating properties when in contact with mucous membranes.

Along with the visible smoke, a number of gases are produced by the combustion process. The composition of these gases is variable, depending on what substance is burning and the

†*From the department of anesthesiology, University of Louisville School of Medicine, Louisville, Kentucky*
**Surgeon, Louisville Division of Fire*

conditions of burning. Carbon dioxide and carbon monoxide are always present in varying proportions and account for the bulk of the gases produced.[2] A summary of the other principle toxic combustion products of common substances is presented in Table I.

In addition to the gases produced by combustion, the smoke may contain other toxic chemicals liberated as a result of industrial fires or explosions and volatilized by the heat of the fire. In some cases, toxic chemicals may have been employed as extinguishing agents, further adding to the risk.

Effects of Smoke Exposure

Exposure of patients to the complex mixture that is smoke may produce a variety of physiological disturbances which may cause the individual to be "overcome by smoke." Hypoxia is only one of these disturbances. Others result from the ingestion and inhalation of particulate smoke, and exposure to toxic, but not asphyxiating, gases and chemicals. In addition to these direct effects of smoke exposure, the patient may be in difficulty due to the hyperventilation syndrome or the effects of heat.

Hypoxia

Hypoxia in the patient "overcome by smoke" may be the result of breathing an atmosphere deficient in oxygen content because the patient has been trapped in an enclosed space where the oxygen has been consumed by fire or driven out by the space-occupying effect of smoke or gases. This type of hypoxia is more common in civilian fire victims than in firefighters, since the latter are usually able to ventilate such areas before entering or bring an oxygen supply with them in the form of self-contained breathing apparatus.

A more common cause of hypoxia associated with smoke exposure is carbon monoxide poisoning. This gas is a common product of the combustion of any organic material, and the inhalation of even low concentrations of this gas produces hypoxia by virtue of its greater affinity for hemoglobin than that of oxygen. The resutling carboxyhemoglobin cannot transport oxygen. Most patients tolerate conversion of up to 20 percent of their hemoglobin to carboxyhemoglobin with little difficulty but the presence of 30 percent carboxyhemoglobin will almost invariably produce symptoms of hypoxia.

The widespread use of protective gas masks has materially reduced the incidence of clinically detectable carbon monoxide poisoning in firemen following a single exposure to smoke. These masks are usually worn whenever heavy smoke is present, but removed when the fire is out and the building ventilated. Studies made by the Denver Fire Department[7] have shown that significant concentrations of carbon monoxide may still be present after a fire has been extinguished, or may be evolved by fires that produce little visible smoke to suggest the need for a gas mask. Under these conditions, the carboxyhemoglobin level in the blood of the exposed firemen may not rise high enough to produce symptoms, but a second or third exposure to similar conditions within the next few hours will have a cumulative effect because carbon monoxide remains combined with hemoglobin for many hours. Thus, carbon monoxide poisoning in firemen occurs most often after repeated exposures to low concentrations of the gas, and it occurs despite the fact that properly functioning gas masks were available, but were removed too soon or were not worn at all.

The use of a gas mask or other respiratory protective device may actually cause hypoxia if such devices are improperly used or prove to be faulty. These devices are discussed in detail in the American Industrial Hygiene Association's *Respiratory Protective Devices Manual*,[8] and only a few of their common hazards will be presented here. Most fire departments are equipped with two types of respiratory protective devices: gas masks, and self-contained breathing apparatus. The gas mask is usually a full-face mask supplied with a universal filter cannister which is designed to protect against carbon monoxide and certain other gases in low concentrations by chemical absorption from the inspired air. Filters are provided to remove particulate smoke as well. The gas mask has no intrinsic oxygen supply, and the wearer will suffer hypoxia if the mask is used in oxygen-deficient atmospheres. Hypoxia may also result if the wearer does heavy work and is unable to draw a sufficient volume of air through the high resistance of the cannister, or if carbon monoxide enters due to a poor mask fit, or an exhausted or faulty cannister.

TABLE I

PRINCIPLE TOXIC COMBUSTION PRODUCTS OF COMMON SUBSTANCES*

Substance	Pulmonary Irritants	Other Toxic Gases	Reference
wood, cotton newspaper	Acetaldehyde, Formaldehyde	Acetic acid, Methane, Formic acid	#2
petroleum products	Acrolein	Similar to wood, etc.	#2, #3
wool, silk	Ammonia	Hydrogen sulphide, Hydrogen cyanide	#2, #3
nitrocellulose film	Oxides of nitrogen	Similar to wood	#2
cellulose acetate film	None	Similar to wood	#2
polyester resins	Hydrogen chloride		#4
polyurethane foam	Isocyanates	Hydrogen cyanide	#4
polyvinylchloride	Hydrogen chloride, phosgene, chlorine		#4
polyfluorocarbons (e.g. Teflon®)	Octafluroisobutylene		#4, #5
phenolic resins	Ammonia, formaldehyde	Hydrogen cyanide	#6
melamine resins	Ammonia	Hydrogen cyanide	#6
rubber latex foam	Unknown, but exposed rats		#4
neoprene foam	die from pulmonary edema		

**Carbon monoxide and carbon dioxide are produced in all cases.*

Self-contained breathing apparatus as used in the fire service usually consists of a full face mask with non-rebreathing valves coupled to a tank of compressed air via a demand valve. In some cases, oxygen-supplied masks employing closed rebreathing with carbon dioxide absorption are used. This equipment affords complete protection against the inhalation of all types of smoke and toxic gases, and may be used to enter areas of reduced oxygen content. However, hypoxia may result while using this apparatus if the valves are faulty, the air supply becomes exhausted, or the wearer overbreathes the capability of the demand valve to supply air. Hypoxia that may develop while using any type of respiratory protective device is often unrecognized until an advanced stage is reached because the victim believes himself to be protected. The physician may be similarly misled.

Regardless of the cause of hypoxia, similar symptoms appear in all cases. At first, there is impairment of judgment, headache, and dizziness. Later delirium, convulsions and coma are seen. In carbon monoxide poisoning the skin and mucous membranes may appear flushed, whereas cyanosis may accompany other types of hypoxia. All types of hypoxia should be treated by the inhalation of oxygen. For the treatment of carbon monoxide poisoning, 100 percent oxygen is required. This may be supplied by a non-rebreathing mask or anesthesia machine, but cannot be supplied by conventional oxygen masks, tents or catheters. If respiration is absent or depressed, emergency resuscitation should be carried out according to accepted methods, using mouth-to-mouth breathing or a properly functioning mechanical resuscitator.

Since an episode of hypoxia may be followed by a period of several hours during which judgment and other mental functions are impaired, these patients should be observed for several hours following apparent recovery. In the case of firemen, they should not be returned to work in the same fire, in spite of an apparent rapid recovery.

The patient "overcome by smoke" may indeed, then, be a victim of hypoxia, but factors other than asphyxia may be responsible for all or part of the patient's difficulties.

Effects of Particulate Smoke

Exposure to clouds of heavy fire smoke may produce disturbances entirely aside from hypoxia due to the space-occupying properties of such smoke, or the toxic effects of gases mixed with the particulate matter. Smoke particles consist mostly of carbon, often coat-

ed with condensed products of combustion such as organic acids and aldehydes. Some particles are small enough (0.005-1.0) microns[8]) to be inhaled deeply into the lungs. The effect of inhaling such particles on pulmonary function has not been evaluated acutely or chronically. Clinically, the inhalation of smoke particles appears to do little harm other than to produce a mild irritation of the tracheobronchial tree with some cough, increased secretions, and complaints of substernal burning sensations.

A great deal more damage seems to be done by smoke particles which are not inhaled at all. Irritation of the conjunctiva may result from contact with the eyes, and a great deal of particulate smoke becomes deposited on the mucosae of the nose and pharynx, producing irritation of these structures. Most of this material is then swallowed, resulting in gastritis. Nausea and vomiting may begin in a very short time, become severe enough to be incapacitating, and persist for many hours.

Since the symptoms in this instance are produced by ingestion, Levin[9] has suggested that this condition be called "smoke poisoning" to clearly distinguish it from smoke inhalation. Smoke poisoning is probably the most common problem in patients "overcome by smoke", and the administration of oxygen is of no value. The oral administration of any common antacid preparation usually brings prompt relief.

Toxic Gases and Vapors

The most common toxic gas found in fire smoke is carbon monoxide, and the effects of this gas on patients "overcome by smoke" have been discussed. Smoke may contain a number of other gases with serious toxic properties entirely unrelated to asphyxia. For the purpose of discussion, these agents may be divided into gases which are primarily pulmonary irritants and those with other actions.

Pulmonary Irritants

Patients "overcome by smoke" may have been exposed to two types of pulmonary irritants. These are the organic aldehydes, such as acrylic aldehyde (acrolein) and acetaldehyde (Table I), and the acid anhydrides. While the former are certainly capable of producing severe pulmonary lesions in the laboratory[7], their toxicity under clinical conditions appears to be much less than that of the latter group. This is probably because the aldehydes tend to condense out of the smoke before they can be inhaled, while the acid anhydrides normally exist in the gaseous state which allows them to enter the lungs more readily.

Thus, the pulmonary lesions due to chemical irritants are most often produced by chlorine, phosgene, and other similar compounds either produced by combustion (Table I) or released from storage tanks, e.g. chlorine, or refrigerating units, e.g. sulphur dioxide or ammonia. Exposure to pulmonary irritants is becoming more common due to the increasing use of plastics which produce these toxic gases when burned.

The clinical picture and pathologic changes in the lungs seen after exposure to pulmonary irritants have been described by Conner, Dubois, and Comroe[10]. Initially, there is intense choking and coughing which diminishes when the victim is removed to fresh air. This is followed by a period of up to six hours during which there are few, if any, symptoms or signs to suggest that any damage has been done. At the end of this period, respiratory distress appears rapidly and varying combinations of pulmonary edema, atelectasis, acute emphysema and bronchopneumonia occur. Death may result in a few hours after the onset of symptoms.

It is important to establish as soon as possible whether the patient "overcome by smoke" has been exposed to a pulmonary irritant, as immediate treatment with large doses of steroids will usually prevent the development of serious damage. Since the inhalation of these irritants usually produces an intense sensation of choking or suffocation, a history of exposure to "choking smoke" should be sought from the patient. The physician should also attempt to ascertain if the fire involved plastics or synthetic fibers, if there were any known leaks of chlorine or similar substances, and what type of respiratory protective device was used, if any. The cannister type gas mask does not afford adequate protection against the acid anhydride pulmonary irritants. If there is a good history of exposure to a pulmonary irritant, the patient should be hospitalized and given 500 mgm of hydrocortisone sodium succinate (Solu Cortef®) intravenous-

ly at once, followed by 100 mgm every four hours until a total of one gram has been given. If no symptoms develop, therapy can be stopped and the patient discharged. If symptoms appear, steroid therapy is continued for three or four days with gradual reduction in dosage.

The use of steroids in the treatment of this type of chemical injury to the respiratory tract is based on the suggestion of Conner, et al, [10] and supported by published experiences with their use in similar conditions such as aspiration of acid gastric contents, [11,12] and in poisoning by the higher oxides of nitrogen.[13] The particular regimen of therapy presented above has been used by the present authors with excellent results in seven patients, two of whom were exposed to chlorine, two to phosgene, one to higher oxides of nitrogen, and two to unidentified pulmonary irritants.

When the history of exposure is not clear, the patient should be kept under close observation for at least 12 hours, and the chest frequently examined for the presence of asthmatic wheezes. The appearance of wheezes is usually the first sign of impending difficulty, and steroid therapy, as outlined above, should be started at once and continued for several days. Bronchodilators and intermittent positive pressure breathing are also helpful in any patient who experiences symptoms of pulmonary irritation. Other supportive therapy, such as tracheotomy, continuous artificial ventilation, and treatment for pulmonary edema may be necessary, as described by Conner et al.[10]

Other Gases and Vapors

Exposure to a number of chemicals which are not pulmonary irritants may occur as a consequence of fires and result in the patient being "overcome by smoke." Poisoning by hydrogen sulphide or hydrogen cyanide may occur, as these gases may be formed as products of combustion. (Table I) Industrial fires may cause leaks from storage or processing equipment, releasing their contents in large quantities. Heat will increase the vaporization of these substances, and very high concentrations may be inhaled by unprotected or unwary individuals. Most of the common industrial solvents such as benzene, toluene, carbon tetrachloride, etc. have a narcotic action when inhaled in high concentration,[14] and varying degrees of central nervous system depression, including unconsciousness, may be produced. If the fire involves a plant, manufacturing known toxic substances such as insecticides, then individuals "overcome by smoke" may be poisoned by these agents.

Chemical poisoning may result from non-industrial fires if chemical extinguishing agents such as carbon tetrachloride or methyl bromide have been employed. Fortunately, these agents are little used nowadays, having been largely replaced by less hazardous agents such as carbon dioxide, foam and dry powder.

As in the case of exposure to pulmonary irritants, the physician caring for the patient "overcome by smoke" must obtain an adequate history as to what was burning, what chemicals were used or stored in the building, the presence or absence of any known leaks of these substances, and what extinguishing agents were used. The toxic chemical involved should be identified as soon as possible so that specific therapy can be undertaken in addition to general supportive measures such as airway maintenance, oxygen and artificial respiration.

Effects of Heat

The patient "overcome by smoke" may be more a casualty of the heat that accompanies the fire than of the smoke, and he may be suffering from thermal injury to the respiratory tract or dehydration. The inhalation of flame or hot, dry air will ordinarily produce injury only to the nose, mouth, and pharynx, since the specific heat of dry air is too low to burn the lower respiratory tract.[15] On the other hand, the inhalation of steam or very moist, hot air is capable of producing severe injury of the lower respiratory tract.[16] Steam inhalation may follow the rupture of boilers or steam lines, but more often the steam is evolved in the course of fighting the fire. The common use of "fog" to extinguish fires in enclosed spaces such as rooms is a good example. Here, a special nozzle is used to generate a heavy mist of small particles of water which serve to smother the fire, but heat quickly turns much of the water to steam which may be inhaled by firefighters or persons trapped in the room. The management of patents with thermal injury to the respiratory tract is carried out as described above for the

lesions produced by pulmonary irritant chemicals. The major difference between these two injuries is the rapid onset of symptoms after thermal injury.

Firefighters working in their heavy protective garments in the presence of heat may lose sufficient salt and water from perspiration to become severely dehydrated and collapse. Milder degrees of dehydration may also complicate the patient's other difficulties. This problem is managed by removing the patient to a cool place and the intravenous administration of physiological saline solution. The administration of large volumes of fluid and electrolytes intravenously may be necessary to correct dehydration and restore the blood volume and urine output. Ocassionally, active cooling of the patient will be needed to lower an abnormally elevated body temperature. Firefighters should be encouraged to rehydrate themselves promptly after exposure to conditions of high temperature, since they often experience repeated exposures during a 24-hour duty period.

Indirect Effects of Smoke Exposure

A number of patients "overcome by smoke" are found to have a typical hyperventilation syndrome, with deep, rapid respirations. This causes rapid "blow-off" of carbon dioxide and respiratory alkalosis which leads to dizziness, numbness of the hands and feet, carpopedal spasm and sometimes unconsciousness. These symptoms usually develop after leaving a smoke-filled environment rather than while in it. In some cases, the hyperventilation is due to anxiety alone, but in most it is probably a physiologic response to hypoventilation which took place during exposure in an attempt to avoid breathing the smoke. The administration of oxygen from a resuscitator increases the degree of hyperventilation and aggravates the symptoms. These individuals respond rapidly if made to rebreathe their exhaled air so that the carbon dioxide tension returns to normal.

Finally, the patient "overcome by smoke" may collapse as a result of heart disease. The stresses of fear, the emergency situation, heat, heavy physical effort and hypoxia may combine to produce myocardial infarction or other acute cardiac emergencies. Firemen in the 50-60 year age group are especially vulnerable, but civilian fire victims and persons of other age groups are not exempt. An electrocardiogram should be done routinely on anyone "overcome by smoke" who is over 50 years of age or has evidence of pre-existing cardiovascular disease.

Summary

All patients "overcome by smoke" are not victims of asphyxia, but may be suffering from the effects of toxic gases, the ingestion of particulate smoke, and the effects of heat and hyperventilation. Oxygen therapy alone is often inadequate treatment.

References

1. Fewer Fire Fighters Injured but More Suffer from Smoke, *International Fire Fighters,* 50: 16 (Oct.) 1967.
2. Olsen, J. C.; Ferguson, C. E. and Scheflan, L.: Gases from Thermal Decomposition of Common Combustible Materials. *Indus. & Eng. Chem. 25:* 599-603 (June) 1933.
3. Wilds, J. L. editor: Fire Gas Research Report. *Nat. Fire Protection Assoc. Quarterly, 45:* 280-306 (Jan.) 1952.
4. Dufore, R. E.: Survey of Available Information on the Toxicity of the Combustion and Thermal Decomposition Products of Certain Building Materials Under Fire Conditions. *Underwriters' Laboratories Bulletin of Research* No. 53, July, 1963.
5. Tepper, L. B.: Hazards to Health—Teflon.® *New Eng. J. Med. 267:* 349-350 (16 Aug.) 1962.
6. *Fire Hazards of the Plastics Manufacturing and Fabricating Industries.* National Board of Fire Underwriters Reserch Report No. 1, 1963.
7. Wise, M. K.: Denver Draws Blood to Check Carbon Monoxide. *Fire Engineering, 119:* 28-31 (July) 1966.
8. *Respiratory Protective Devices Manual,* American Industrial Hygiene Association, 1963.
9. Levin, M.: Smoke Poisoning Treated by Antacids. *J. Med. Soc. New Jersey, 62:* 215-16 (June) 1965.
10. Conner, E. H.; DuBois, A. B.; and Comroe, J. H. Jr.: Acute Chemical Injury to the Respiratory Tract and Lungs. *Anesthesiology, 23:* 538-547 (July-Aug.) 1962.
11. Bannister, W. K.; Sattilaro, A. J. and Otis, R. D.: Therapeutic Aspects of Aspiration Pneumonitis in Experimental Animals. *Anesthesiology, 22:* 443-444 (May-June) 1961.
12. Lewinski, A.: Evaluation of Methods Employed in the Treatment of the Chemical Pneumonitis of Aspiration. *Anesthesiology, 26:* 37-44 (Jan.-Feb.) 1965.
13. Prys-Roberts, C.: Principle of Treatment of Poisoning by Higher Oxides of Nitrogen. *Brit. J. Anaes. 39:* 432-439 (May) 1967.
14. Browning, E.: *Toxicity and Metabolism of Industrial Solvents,* Amsterdam, Elsevier Publishing Co., 1965.
15. Moritz, A.: *Symposium on Burns,* National Academy of Sciences, National Research Council, 1951.
16. Fineberg, C.; Miller, B. J. and Allbritten, F. F. Jr.: Thermal Burns of the Respiratory Tract. *S. G. & O., 98:* 318-323 (March) 1954.
17. Salem, H. and Cullumbine, H.: Inhalation Toxicities of Some Aldehydes. *Toxicology & Appl. Pharm. 2:* 183-187 (March) 1960.

Blood Banking and Immunohematology (1900-1968) Solid Steppingstones for Tomorrow†

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A significant event in 1968, the Centennial of the birth of Karl Landsteiner, M.D., is the interest in old and new contributions of blood group immunology and how these relate to organ transplantation. The current status of blood group immunology is presented with a discussion of pertinent problems and progress.

IT seems most appropriate in 1968 to center attention on Karl Landsteiner, M.D., the Father of Immunohematology, and to review the scientific events arising from and since his discovery of the human A-B-O blood groups in 1900-1901. (Figure 1) We celebrate, this year, the 100th anniversary of Doctor Landsteiner's birth and, indeed, the exciting story begins when Gregor Mendel's original genetic findings in 1865 were rediscovered in 1900 by De Vries, Correns, and Tschermak, independently. It was here that the scientific basis for new disciplines was laid down. These include the rapid expansion of genetics, cytology, blood group serology, and immunology into what we know today as cytogenetics, immunohematology, immunochemistry, immunogenetics and immunoanthropology.

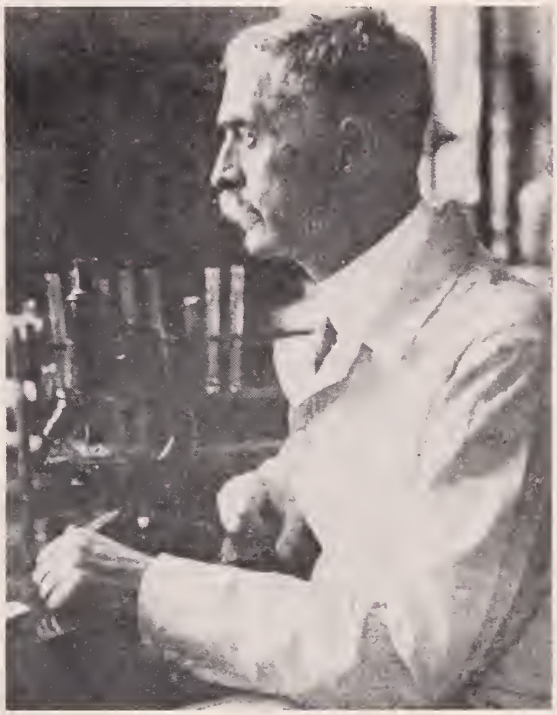


FIGURE 1

Materials and Methods

Following the discovery of the A-B-O system, no new system was found for 25 years until Landsteiner and Levine, using rabbit immune serum produced with human red cells, identified the MN and P antigens and systems.

The next major steps came in 1940-41 when Landsteiner and Wiener immunized rabbits with the erythrocytes of the Rhesus monkey, and with the anti-Rhesus serum were able to identify an antigen on the red cells of approximately 85 percent of New York adults tested.

At about the same time (1939-41), equally important work was being pursued by Levine and others who showed that hemolytic disease of the newborn is caused by iso-immunization between fetus and mother during pregnancy.

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BLOOD GROUP SYSTEMS (MAIN)

NAME	YEAR DISCOVERED
ABO	1900-1901
MNS	1926
P	1926
Rhesus (Rh)	1941
Lutheran (Lu)	1945
Lewis (Le)	1946
Kell (K)	1946
Duffy (Fy)	1950
Kidd (Jk)	1951
Diego (Di)	1955
I	1956
Yt	1956
Auberger (Au)	1961
Xg	1962
Dombrock (Do)	1965

FIGURE 2

Following the application of the anti-globulin (Coombs) test in 1945, the discovery of new systems came more rapidly. The discoveries were achieved by the use of this new tool, with clinical studies of patients receiving massive blood transfusion and in cases of hemolytic disease of the newborn.

How many blood group systems are there today? (Figure 2). We can probably account for 15 in the following order: A-B-O, Lewis, MNS's, P, Rhesus, Lutheran, Kell, Duffy, Kidd, Diego, Cartwright, Auberger, Xg, Dombrock, and I.

NOMENCLATURE

Prior to 1941, there was much confusion in identifying blood group donors, interpreting results of serological tests, and even in compatibility testing due to the existence of three systems of nomenclature.

In 1907 Jansky suggested the designation of the blood groups by numbers (Roman numerals), and a short time later Moss made a similar proposal, reversing the Jansky groups I and IV. When compared to the International Nomenclature of Landsteiner (A-B-O), the situation was such that Jansky's group I was group O while in the Moss system group O was Roman numeral IV. (Table 1)

TABLE 1

International	Jansky	Moss
O	I	IV
A	II	II
B	III	III
AB	IV	I

The International Nomenclature of Landsteiner has been mandatory in the U. S. Army since 1941. It is not generally appreciated that the military was a pioneer in this important standardization of A-B-O nomenclature.

Not as easily resolved stands the problem of agreement on a single universal or international set of appropriate symbols for the Rh blood group system. There are two widely used systems in use today among blood banks, blood group serology laboratories, and scientists in related fields of genetics, sero-anthropology, and many others. These are:

1. The Wiener Rh-Hr nomenclature
2. The Fisher-Race CDE nomenclature

Because of Wiener's contribution to standardization of forensic procedures, the official report of paternity studies performed in our Reference and Forensic-Testing Laboratory uses the Wiener Rh-Hr nomenclature exclusively. On the other hand, because of government requirement through the Division of Biologics Standards of the National Institutes of Health, Rh antisera are labelled with symbols representing *both* the Wiener and Fisher-Race systems. Kiel has recently raised the question in his published study on "Blood Tests for Paternity Claims: Are Army Procedures Adequate?" In this review, Doctor Kiel concludes, "that it would appear that Army Regulation 608-99 should be revised to avail the serviceman of the benefits of blood testing procedures before he is asked to make a decision regarding admission of paternity." Possibly during the revision of this AR progress can be made in standardizing the Rh system of nomenclature by the military as successfully as it resolved the A-B-O problem in 1941.

THE XG BLOOD GROUP SYSTEM

The normal number of chromosomes in man is 46. All of the blood group systems (genes) known, until 1962, were located, as genes, on chromosomes referred to as autosomes. (Figure 3) The exact loci of these blood group genes and the specific autosomes on which they are located are still not known. However, the first sex-linked blood group system was discovered in 1962 by Mann, *et al.*[1], and named Xg. The Xg^a blood group is present in 62 percent of Caucasian males and 89 percent of Caucasian females.

One of the applications of the Xg blood

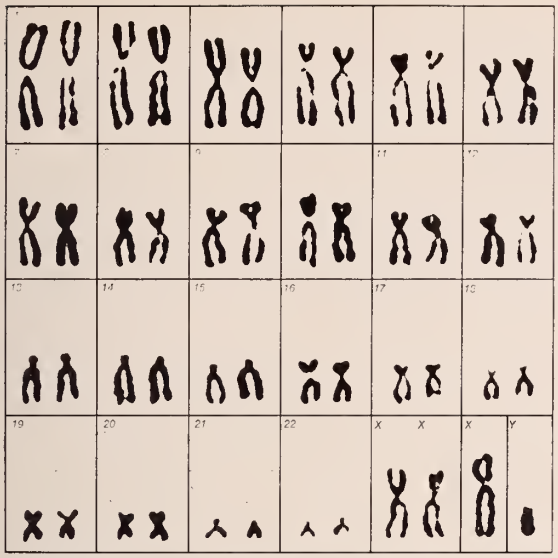


FIGURE 3. The last two photographs (X and Y) in lower right hand corner show X and Y chromosomes of a normal man.

(This photograph courtesy of the Upjohn Co., Kalamazoo, Mich., from "Genes in Action", 1966, page 9.)

group system is in studying sex chromosome abnormalities and, specifically, whether nondisjunction in Klinefelter's and Turner's syndrome has occurred at oogenesis or spermatogenesis.

SERUM PROTEIN GROUPS

In addition to the red cell antigens, attention has been directed to the serum protein antigens and the serum protein groups.

Polymorphism is the occurrence of two or more genetically determined alternative phenotypes in a population, in frequencies too great to be maintained by mutation alone. These genetic variations are especially seen in the human immunoglobulins.

In 1956, Grubb, *et al* demonstrated that rheumatoid sera contained antibodies reacting with antigens carried by gamma globulin in the serum of certain patients with rheumatoid arthritis. (Figure 4) The antigenic determinant was subsequently named Gm(a) and was localized to the heavy chain of IgG. In 1960-61, Ropartz, *et al.*[3] showed that the light chains of immunoglobulins also carry specific determinants which, like Gm, were first detected by showing that they would inhibit the reaction between a particular serum (anti-Inv) and Rh-sensitized red cells.

The demonstration of the genetic polymorphism of antigens on the IgG molecules of man described by Grubb, *et al.* and Ropartz, *et al.* above provide a new approach to problems in formal genetics, population genetics, biochemical genetics, and, eventually, perhaps clinical genetics (Steinberg).

Arthur G. Steinberg, Ph.D. states that at least 21 genetically polymorphic antigens have been demonstrated on the IgG molecules of man. Seventeen are inherited via one "genetic system" and four via another. A genetic system in man may be defined as a section of a chromosome (i.e., a sequence of DNA) that determines a series of phenotypes that are not randomly distributed in population samples and that, as shown by family studies, appear to be inherited by a gene system. The first set is known as the Gm factors, the second as the Inv factors[4].

Transfusion reactions due to serum incompatible for the Gm and Inv factors can conceivably occur but are unlikely to be common. Further work to delineate the frequency of this phenomenon in unexplained transfusion reactions is certainly necessary.

SERUM PROTEIN GROUPS

SYSTEM	GLOBULIN FRACTION	FUNCTION
Gm	$\gamma(\gamma G)$	Antibody
Inv	γ	Antibody
Haptoglobin	α_2	Hb-binding
Transferrin	β_1	Fe-binding

FIGURE 4

Other serum groups are haptoglobin and transferrin. When hemoglobin (Hb) is added to serum or plasma, it forms a stable complex with haptoglobin (Hp), and alpha$_2$ globulin[5]. Since this complex is not excreted, the plasma Hp level is a major determinant of the renal threshold for Hb[6]. Transferrin is a glycoprotein of about 90,000 molecular weight with a 5.5 percent carbohydrate content[7].

Since iron is an essential component of hemoglobin as well as a number of other important tissue components, the beta globulin, transferrin (or siderophilin), which binds and transports iron is an indispensable serum protein[8].

FORENSIC APPLICATIONS

In 1903, Landsteiner and Richter published a paper on the "Utilization of Individual Blood Differences for the Forensic Practice." Since then great strides have been made in applying these principles to erythrocytes, serum, blood

RESULTS OF PATERNITY TESTING BY TWO METHODS

	Group and Subgroup	M - N Type	Rh - Hr Type
Father	A_1	MNss	Rh_o
Mother	A_1	NNSs	Rh_o
Child	A_1	NNss	Rh_o

Gm TYPING OF SAME FAMILY

Father	Gm (a-, z-, f+, b+)
Mother	Gm (a-, z-, f+, b+)
Child →	Gm (a+, z+, f+, b+)

FIGURE 5

crusts, stains, semen, saliva and hair. In our Forensic-Testing Laboratory at Fort Knox, we have employed one of the newer systems. The use of the Gm system in conjunction with the blood group systems has been reported as a possible adjunct in paternity cases[9]. Human sera retain the Gm factors well when stored at -20°C. An example of application is seen in Figure 5. The blood groups provide no exclusion for the putative father. The Gm typing, however, sheds a different light on the study. The findings are interpreted as showing that the child possesses the genetic antigens Gm (a) and (z) which could not have been inherited from the mother or putative father. Such a finding indicates the putative father can be excluded as the child's father. These findings do not constitute *legal evidence* and as such can only be used in addition to other blood grouping studies. The results of the Gm typing are interesting in that they bring new information to bear on the problem.

The use of serum for forensic purposes will undoubtedly find greater use in the future as the studies of the various polymorphic antigens of the serum constituents reach the level of sophistication of the red cell antigens. The wide variety of genetically variable traits found amoung the serum immunoglobulins, haptoglobins, transferrins, and lipoproteins, to name a few, may eventually permit the establishment of an individual profile as specific as fingerprints—such information has obvious forensic value.

BLOOD PRESERVATION, SHIPPING, AND STORAGE

Our discussion would not be complete without mention of blood preservation. In a recent study, ACD and CPD with and without adenine had survival values over 70 percent after 28 days storage. After 35 and 42 days, only those containing adenine remained over 70 percent. During these studies, none of the recipients demonstrated signs of toxicity.

Because of these findings, use of adenine to help preserve blood has been proposed with the use of 35 days as the new expiration period, though blood stored for 42 days could be used in an emergency.

Frozen blood has been used for the past several years with some degree of success. It certainly has an urgent need in long-term storage of the very rare human blood groups. Long-term preservation (1 year) seems a reality now, also, for human platelets. In regard to frozen red cells, the extension of the post-thaw shelf life is an area under investigation and the use of an adenine supplement would seem to be an important avenue of investigation.

AUTOMATION IN IMMUNOHEMATOLOGY

The next aspect we will review is the current role of automation in this field.

In our laboratories at Fort Knox we have an autoanalyzer in daily operation to assist in the routine procedures of our blood processing laboratory. (Figure 6) This 15-channel apparatus performs red cell grouping, serum grouping, and antibody screening. Rh typing, a test for syphilis, and a test for infectious mononucleosis are also carried out on this autoanalyzer.

Other machines are employed for prenatal Rh antibody screening, red cell survival studies, and, most recently, the development by Captain Stephen D. Litwin at our Fort Knox laboratories, of an automated technic



FIGURE 6

for Gm typing. Three special machines are also under study. They are:

1. Detection and measurement of natural A and B antibodies
2. Detection and measurement of immune A and B antibodies
3. Detection and measurement of hemolysins

The attainment of a quantitative hemagglutination test which can be standardized is now possible.

Summary

Advances in the field of immunohematology are making their way into today's research and clinical laboratories and blood banks. The newer technics being evolved and actually in use require the constant training of our staff personnel. A rapid scan sees today's technologists not only employing excellent blood collection technics, including plasmapheresis, but also the most sophisticated antibody screening and crossmatch compatibility tests. In addition, they are engaged in the adjoining specialties of immunogenetics and immunochemistry in the search to learn more about the polymorphisms in our blood, a few of which have been discussed in this paper. Therefore, today's laboratories are increasingly developing experience with complex scientific equipment, fitting in more experienced type personnel into their operation and training existing technologists. These newer technics include: electrophoresis, immunoelectrophoresis, immunodiffusion, ultracentrifugation, and chromatography.

Finally, we close on the theme that we are commemorating in 1968 the centennial of the birth of Karl Landsteiner. Therefore, we would like to give you a progress report on the availability of translations and reproductions of scientific treatises in blood group immunology.

This series of fundamental research reports from the field of blood group immunology has been prepared for the Fellowship in Blood Banking and Immunohematology for career military personnel. Some have been translated from other languages while others, originally in English, have become inaccessible. One very recent report has been included because it so perfectly supplements an older paper on the same topic. It is upon such fundamentals that the specialty of blood transfusion therapy has reached its present level of pre-eminence.

The translation in 1964 of Arne Gammelgaard's thesis on weak A blood resulted from our belief that it was of fundamental importance to the study of group A bloods weaker than A_2. Despite its inaccessibility for more than 20 years, this work has been cited in the references of the majority of papers dealing with this subject which have appeared in English during the past decade and more. In retrospect, much of the confusion in classification of the weak subgroups of A might have been avoided had Gammelgaard's data and conclusions been more widely appreciated. Impressed by the impact of the Gammelgaard experience, and desiring to encourage scholarly pursuit in the Fellowship in Blood Banking and Immunohematology, we have assembled 34 papers and two monographs mainly from the older scientific literature. Having thus been faced with substantial effort

(Continued on page 1133)

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Drugs and the Physician-Patient Relationship

Donn L. Smith, M.D.*

ONE of the most fundamental elements of the physician-patient relationship involves the employment of drugs by the physician in the therapy prescribed by him in the management of illness and in the prevention of disease for his patients.

This important relationship is being exposed to scrutiny by a fairly large number of third party organizations as well as by a highly informed and interested public. A recent report by the HEW Task Force on Prescription Drugs represents a look at the problem by a major government agency. Besides the pharmaceutical industry, the interested third parties include federal agencies, insurance companies, voluntary health organizations, state health departments and others traditionally concerned, including county and state medical societies and the AMA itself, particularly through its Council on Drugs.

The increased public exposure of the therapeutic interface between patient and physician is introducing new and critical questions and problems. The manner in which these problems are solved will have significant and possibly far-reaching impact upon the practice of medicine as it is now constituted.

Some of the questions which must be faced are: Will a regulating and policing function be interposed at the patient-physician interface by third party intervention? Will physicians be required to adhere to dosage levels and regimes developed by third party agencies? Will the physician's choice of therapeutic agent be prescribed by rule and regulation? Will the physician retain any of the requisite freedom of action in his management of the patient's health problems? Can the confidential and privileged nature of the physician-patient relationship survive in the face of substantial involvement of third parties? These and other questions are now being raised; answers and solutions will be urgently required.

It would appear that the medical profession may not be the sole producer of the necessary answers and solutions. In this context, it is incumbent upon the profession to demonstrate its fitness and desire to produce as many significant answers as may be required. Part of such a demonstration will be a solidarity of purpose within the medical profession to the end that we must exercise a major and effective influence in the determination of the nature and extent of the patient-physician relationship relative to therapy in all forms.

Reasonable and acceptable solutions to this complex and important relationship will require full consideration of a common denominator applicable to all of the facets and complications which may arise. Such a common denominator is most certainly the ultimate welfare of the patient.

If the medical community and all of the interested and concerned third party agencies and organizations can agree that patient welfare is to be the primary objective and the basic indicator, then adequate and just decisions may be forthcoming. It would appear to be essential that the general public must be informed and educated to this objective, inasmuch as the public will, in one way or another, undoubtedly sit in final judgment.

The current prerogatives of the third parties are worth reviewing. It is accepted, in our current frame of reference, that third parties may be legitimately concerned with: purity and production standards for therapeutic agents, accuracy in statements concerning dosage forms, accurately stated amounts of active agents in dosage forms, assurance of the avail-

*Dean, University of Louisville School of Medicine, Louisville, Kentucky

ability of critical therapeutic agents, supervision of the clinical reliability and safety of new preparations, and professionally oriented supervision of claims made by the manufacturers relative to therapeutic compounds. Effective and positive action in these areas are conceded to be in the domain of the public welfare by most physicians.

From the scientific point of view, accurately stated and reliable information concerning dosage range, including minimum effective and maximum safe dose amounts, are generally welcomed as valuable supporting data for the practicing physician. Information dealing with cumulative action, side effects, known contraindications, and cautionary measures also are welcomed and have proven to be in the best interest of patient and physician alike.

Another area where third party activity could be expressed with positive benefit is in the area of drug costs. All of these activities may be properly undertaken and addressed in a very meaningful way to the welfare of the patient. In addition, any necessary restrictions imposed by third party activities as listed above would result in little invasion of the traditional rights of the physician to conduct the management of his patients' medical problems.

Third party activities of this type are properly ancillary to the practice of medicine, and the conscientious and concerned physician may respond to them in a positive way. There may be differences of opinion among third party groups, which include the pharmaceutical industry, concerning the appropriate mechanisms and the efficiency of the way in which control activities are currently conducted. This need not concern the physician, who may well benefit from the ultimate solution of problems between third party groups, provided that a policing and regulatory system is not allowed to evolve in terms of intervention between the physician and his patient.

The medical community must discharge several obligations if the free expression of the patient-physician relationship is to remain intact. First, all physicians must assume a positive and confident posture towards the desirability of freedom of action by the physician in his usage of the therapeutic agents. We should react vigorously against any attempt at third party interference in the basic physician-patient relationship. Secondly, and equally important, all physicians must develop and maintain a high degree of competency in the utilization of drugs, employ such agents in a conscientious and rational manner, and continue to give the welfare of the patient highly competent and exclusive attention.

The medical schools may play a major role in this problem. Improved educational efforts in therapeutics for students and house staff plus more active participation in continuing education for practitioners would be effective measures. This type of educational activity falls well within the mission of the schools of medicine.

It is by these means that the medical community may demonstrate and realistically maintain the appropriate leadership in affairs related to the patient-physician relationship. By a positive approach involving high standards of practice, life-long scholarship and cooperation with others who are legitimately concerned with the public welfare, the physician may effectively protect, by deserving, his traditional freedom of action in patient care and in the use of therapeutic drugs. It is of equal importance, however, that all attempts to introduce any intervention between the patient and his physician, by any third party agency, be resisted in a positive and effective manner.



EDITORIALS



Seeking Public Office—A Challenge to the Physician

THE resolution, "Physician Candidates for the Kentucky General Assembly," as endorsed by the KMA 1968 House of Delegates, invites all of us to seek public office. This editorial supports that plea and tells why it must be done. Separation of the medical profession and government forever disappeared with the roll top desk and the horse and buggy. Now our traditional fee for service and doctor-patient system of medical practice is on public trial. The final decision will be spoken by the people through their elected representatives. Medical "expert" opinion has not been requested for this trial and those who oppose us have involved the doctrine of "res ipsa loquitor."

Physicians possess special insight into problems of human behavior. Our life's work demonstrates social concern and a commitment to human suffering. We are well-educated, self-employed, and well able to afford public service.

Our collective responsibility demands effective participation in public decision making. The public will is best served by representing it in legislative chambers. One hundred House seats and one-half of the Senate will be elected in November, 1969. Mitch Denham, M.D., Maysville, has shown the way. We must accept the challenge to follow.

DAVID B. STEVENS, M.D.

A Thank You

THIS is the sixty-sixth Christmas season for *The Journal* and the past year seems to have gone by very quickly. These are busy times for the physicians of Kentucky as they are for the editors and staff of *The Journal*. It has been a good year for *The Journal* of the Kentucky Medical Association and the editors take this opportunity to thank all of those who contributed to its pages during the year.

Many excellent scientific articles were published. Our thanks to the authors who submitted these scientific papers. We thank our scientific consultants for the thoughtful and conscientious manner in which they carried out their assignments.

A number of Kentucky physicians and others have written timely special articles that contributed to the understanding of special problems. On occasions individuals have contributed general news items that have been of special interest to Kentucky physicians. All of these help *The Journal* perform its special service to Kentucky physicians.

There exists a good relationship between the physicians in private practice and the faculties of the two medical schools in this state. This is reflected in the helpful cooperation that the editors of *The Journal* consistently receive from individual members of the faculties. We are grateful for this kind of pleasant and effective relationship.

Again, a special thanks to the companies that have chosen to advertise their products in *The Journal* during this past year. We know all Kentucky physicians join the editors in expressing our gratitude for their support.

To all of these our thanks—and our best wishes for a Merry Christmas and a Happy New Year.

WALTER S. COE, M.D.

In peptic ulcer: the antacid puzzle



solved by Mylanta®

aluminum and magnesium hydroxides *plus* simethicone

"will it ease the pain?"

Mylanta helps relieve ulcer pain with the two most widely prescribed antacids: aluminum and magnesium hydroxides.

will it help "my gassy stomach"?

Mylanta *also* contains simethicone: for concomitant relief of G.I. gas distress.

"will this one taste O. K.?"

The *prolonged* acceptance of Mylanta was recently confirmed in 87.5% of 104 patients—after a total of 20,459 documented days of therapy.* *Danhof, I. E.: Report on file.

Composition: Each Mylanta chewable tablet or teaspoonful (5 ml.) contains: magnesium hydroxide, 200 mg.; aluminum hydroxide, dried gel, 200 mg.; simethicone, 20 mg. *Dosage:* One or two tablets (well chewed or allowed to dissolve in the mouth) or one or two teaspoonfuls to be taken between meals and at bedtime.

Stuart Division/Pasadena, Calif.
ATLAS CHEMICAL INDUSTRIES, INC.

No two women are quite alike...





and no other oral contraceptive is quite like Ovulen-21®

Each tablet contains ethynodiol diacetate 1 mg., mestranol 0.1 mg.

The progestin is distinctive, and for some women this may mean a different clinical response. The Compack® tablet dispenser is distinctive; its functional simplicity makes it virtually patient-proof. The acceptance of Ovulen-21 is distinctive... together with Ovulen®, it is more often prescribed than any other individual contraceptive product currently available.

Indication—Oral contraception.

Contraindications—Thrombophlebitis, thromboembolic disorders, cerebral apoplexy or a past history of these conditions, markedly impaired liver function, known or suspected carcinoma of the breast, known or suspected estrogen-dependent neoplasia, undiagnosed abnormal genital bleeding.

Warnings—Watch for the earliest manifestations of thrombotic disorders (thrombophlebitis, cerebrovascular disorders, pulmonary embolism, retinal thrombosis); if present or suspected discontinue the drug immediately.

British studies reported in April 1968[1,2] estimate there is a seven- to tenfold increase in mortality and morbidity due to thromboembolic diseases in women taking oral contraceptives. In these controlled retrospective studies, involving 36 reported deaths and 58 hospitalizations due to "idiopathic" thromboembolism, statistical evaluation indicated that the differences observed between users and non-users were highly significant. The conclusions reached in the studies are summarized in the table below:

Comparison of Mortality and Hospitalization Rates Due to Thromboembolic Disease in Users and Non-Users of Oral Contraceptives in Britain.

Category	Mortality Rates		Hospitalization Rates (Morbidity)
	Age 20-34	Age 35-44	Age 20-44
Users of Oral Contraceptives	1.5/100,000	3.9/100,000	47/100,000
Non-Users	0.2/100,000	0.5/100,000	5/100,000

No comparable studies are yet available in the United States. The British data, especially as they indicate the magnitude of the increased risk to the individual patient, cannot be applied directly to women in other countries in which the incidences of spontaneously occurring thromboembolic disease may differ.

Discontinue medication pending examination if there is sudden partial or complete loss of vision, or sudden onset of proptosis, diplopia or migraine. Withdraw medication if papilledema or retinal vascular lesions are found.

Since the safety of Ovulen in pregnancy has not been demonstrated, it is recommended that pregnancy be ruled out for any patient who has missed two consecutive periods before continuing the contraceptive regimen. If the patient has not adhered to the prescribed schedule the possibility of pregnancy should be considered at the first missed period.

A small fraction of the hormone agents in oral contraceptives has been identified in the milk of mothers receiving these drugs. The long-range effect to the nursing infant cannot be determined at this time.

Precautions—Pretreatment physical examination should include special reference to the breasts and pelvic organs, and a Papanicolaou smear.

Endocrine and possibly liver function tests may be affected by Ovulen. Therefore, it is recommended that such tests if abnormal be repeated after the drug has been withdrawn for two months.

Pre-existing uterine fibromyomas may increase in size under the influence of progestogen-estrogen preparations.

Because these agents may cause some degree of fluid retention, conditions which might be influenced by this factor, such as epilepsy, migraine, asthma, cardiac or renal dysfunction, require careful observation.

In breakthrough bleeding, and all irregular vaginal bleeding, consider nonfunctional causes. Adequate diagnostic measures are indicated in undiagnosed vaginal bleeding.

Carefully observe patients with a history of psychic depression and discontinue the drug if severe depression recurs.

Any possible influence of prolonged Ovulen therapy on pituitary, ovarian, adrenal, hepatic or uterine function awaits further study.

A decrease in glucose tolerance has occurred in a significant percentage of patients on oral contraceptives. The mechanism of this decrease is obscure. For this reason, diabetic patients should be observed carefully while receiving Ovulen.

Because of the effects of estrogens on epiphyseal closure Ovulen should be used judiciously in young patients in whom bone growth is not complete.

The age of the patient constitutes no absolute limiting factor, although Ovulen therapy may mask the onset of the climacteric.

The pathologist should be informed of Ovulen therapy when relevant specimens are submitted.

Adverse Reactions—A statistically significant association has been shown between use of oral contraceptives and the following serious adverse reactions: thrombophlebitis, pulmonary embolism.

Although available evidence is suggestive of an association, such a relationship has been neither confirmed nor refuted for the following serious adverse reactions: cerebrovascular accidents, neuro-ocular lesions, e.g., retinal thrombosis and optic neuritis.

The following adverse reactions are known to occur in patients receiving oral contraceptives: nausea, vomiting, gastrointestinal symptoms (such as abdominal cramps and bloating), breakthrough bleeding, spotting, change in menstrual flow, amenorrhea during and after treatment, edema, chloasma or melasma, breast changes (tenderness, enlargement, secretion), change in weight, changes in cervical erosion and cervical secretions, suppression of lactation when given immediately post partum, cholestatic jaundice, migraine, allergic rash, rise in blood pressure in susceptible individuals, mental depression.

Although the following adverse reactions have been reported in users of oral contraceptives, an association has been neither confirmed nor refuted: anovulation post treatment, premenstrual-like syndrome, changes in libido, changes in appetite, cystitis-like syndrome, headache, nervousness, dizziness, fatigue, backache, hirsutism, loss of scalp hair, erythema multiforme and nodosum, hemorrhagic eruption, itching.

The following laboratory results may be altered by oral contraceptives: hepatic function: increased sulfobromophthalein and other tests; coagulation tests: increase in prothrombin, Factors VII, VIII, IX and X; thyroid function: increase in PBI and butanol extractable protein bound iodine, and decrease in T^3 uptake values; metyrapone test; pregnanediol determination.

References: 1. Inman, W. H. W., and Vessey, M. P.: Brit. Med. J. 2:193-199 (April 27) 1968. 2. Vessey, M. P., and Doll, R.: Brit. Med. J. 2:199-205 (April 27) 1968.

Before prescribing see Detailed Product Information.

SEARLE Where "The Pill" Began
G. D. SEARLE & CO., P. O. Box 5110, Chicago, Illinois 60680



If you think the pink pill for U.R.I. symptoms is built for speed and endurance you're on the right track.

Here is a tablet that begins to relieve symptoms of upper respiratory infection quickly—a tablet that works for hours to make it easy for your patient to enjoy continuous relief.

Novahistine Singlet combines effective dosage of an antipyretic-analgesic with a vasoconstrictor-antihistamine formulation to relieve not only the congestion, but also the fever and the aches and pains that almost always accompany upper respiratory infections.

A total daily dosage of 3 or 4 tablets will normally provide the continuous relief your patient expects. Use with caution in patients with severe hypertension, diabetes mellitus, hyperthyroidism or urinary retention. Caution ambulatory patients that drowsiness may result.

PITMAN-MOORE Division of The Dow Chemical Company, Indianapolis, Indiana.

Novahistine®
Singlet decongestant-analgesic

(Each tablet contains: phenylephrine hydrochloride, 40 mg.; chlorpheniramine maleate, 8 mg.; acetaminophen, 500 mg.)

DOW

The John Gaunt Brooks Memorial Meeting of The Kentucky Medical Association

Terrace Room, Kentucky Hotel, Louisville, Kentucky, September 23, 25, 1968

Digest* of Proceedings of the Regular Sessions of the

HOUSE OF DELEGATES

Richard F. Greathouse, M.D., Louisville

Speaker of the House, Presiding

First Session

Speaker Greathouse called the meeting of the KMA House of Delegates to order and called upon Carl Fortune, M.D., Lexington, to give the invocation. John F. Berry, M. D., Lexington, Chairman of the Credentials Committee, reported that a quorum was present. A motion was made, seconded, and passed that the Minutes of the 1967 session of the House of Delegates as published in the December 1967 issue of The Journal of the Kentucky Medical Association be accepted.

Doctor Greathouse then announced the Reference Committee appointments as follows:

Reference Committee No. 1—Reports of Officers and Board of Trustees

Thomas L. Heavern, M.D., Highland Heights, Chairman
N. Lewis Bosworth, M.D., Lexington
Mary Pauline Fox, M.D., Hyden
R. J. Phillips, M.D., Owensboro
Robert S. Tillett, M.D., Louisville

Reference Committee No. 2—Scientific Assembly and Medical Education

C. C. Lowry, M.D., Murray, Chairman
Bush A. Hunter, M.D., Lexington
Glenn R. Powell, M.D., Paintsville
Donn L. Smith, M.D., Louisville
Loman C. Trover, M.D., Madisonville

Reference Committee No. 3—Legislative Activities

David B. Stevens, M.D., Lexington, Chairman
W. Donald Janney, M.D., Covington
Stephen Kelley, M.D., Somerset
W. Faxon Payne, M.D., Hopkinsville
Charles C. Smith, M.D., Louisville

Reference Committee No. 4—Public Service and Medical Services

Kenneth M. Eblen, M.D., Henderson, Chairman
John W. Harrison, M.D., Ashland
Edward N. Maxwell, M.D., Louisville
Robert E. Robbins, M.D., Greenville
Richard J. Wever, M.D., Paris

**Editorial Note: A tape recording was made of the two sessions of the House of Delegates, and any member who desires to examine the transcript of these proceedings may visit the Headquarters Office and listen to the recording.*

Reference Committee No. 5—Governmental Medical Services

Walter Johnson, M.D., Paducah, Chairman
Thomson R. Bryant, Jr., M.D., Lexington
Harold L. Bushey, M.D., Barbourville
Frank M. Gaines, M.D., Louisville
Harold L. Johnson, M.D., Frankfort

Reference Committee No. 6—Constitution and Bylaws and Special Committees

Robert L. McClendon, M.D., Louisville, Chairman
John M. Baird, M.D., Danville
Richard B. McElvein, M.D., Lexington
B. Presley Smith, Jr., M.D., Hawesville
Dixie Snider, M.D., Springfield

Doctor Greathouse pointed out that there are only six reference committees this year rather than the usual seven because of the reorganization of KMA's committee structure in abolishing the council structure.

The Speaker reported that the tellers for the meeting would be W. Faxon Payne, M.D., Hopkinsville, Chairman; C. C. Brueggemann, M.D., Covington; and Irving F. Kanner, M.D., Lexington.

In reading the names of the members of the Nominating Committee for 1968, Doctor Greathouse said that Ralph M. Denham, M.D., Louisville, would be unable to serve on this committee and that he was appointing R. J. Phillips, M.D., to fill this vacancy on the Nominating Committee. The physicians on the Nominating Committee were named as follows: W. Faxon Payne, M.D., Hopkinsville, Chairman; Meredith J. Evans, M.D., Middlesboro; David A. Hull, M.D., Lexington; R. J. Phillips, M.D., Owensboro; and David B. Stevens, M.D., Lexington.

S. Randolph Scheen, M.D., Louisville, KMA Secretary, presented the general announcements.

Among these announcements, the Secretary called attention to the fact that the scientific sessions would begin at 8:50 a.m., on Tues-

day, September 24, in the Convention Center, and that a highlight of the meeting, the President's Luncheon, would feature the Lt. Governor of Oklahoma, George Nigh. Doctor Scheen said that the six reference committees would convene for their sessions at 2:00 p.m., Monday, in various rooms on the mezzanine floor of the Kentucky Hotel, and the Nominating Committee for general officers would meet following the close of this first session of the House.

Following these announcements, Doctor Scheen read the list of physicians who had passed away since the 1967 meeting of the House of Delegates, after which the members of the House stood for a moment of silent tribute. Below are the names of these physicians, their locations and dates of death:

Abell, Joseph Spalding	Louisville	March 21, 1968
Akins, Ernest William	Louisville	September 12, 1967
Barnett, Arthur M.	Louisville	December 17, 1967
Bell, Benjamin S.	Lexington	December 26, 1967
Blair, Everett D.	Morehead	July 14, 1968
Bolin, Benjamin Jackson	Columbia	December 16, 1967
Cave, William Hershell	Henderson	November 19, 1967
Cardwell, Ralph Edwin	Providence	July 16, 1968
Cawood, Oscar Louis	Harlan	March 11, 1968
Cisco, John S.	Salyersville	February 15, 1968
Clay, John Lawson	Morehead	June, 1968
Corum, John R.	Madisonville	February 11, 1968
Coulter, Jay C.	Charlottesville, Va.	January 18, 1968
Fortune, Daniel	Olive Hill	April 4, 1968
Frazier, Russell George	Salt Lake City, Utah	January 14, 1968
Garr, Clyde Louis	Flemingsburg	May 19, 1968
Grigsby, Guy Parham	Louisville	October 7, 1967
Harrod, Charles P.	Palo Alto, Calif.	February 12, 1968
Hays, Henry Clay	Athens, W. Va.	December 7, 1967
Heitger, Joseph D.	Louisville	August 5, 1968
Hester, James Harvey	New Smyrna Beach, Fla.	December 11, 1967
Huffman, William Clyde	Iowa City, Iowa	October 13, 1967
Jamison, William Frederick	Neptune, N.J.	December 9, 1967
Jenkins, Victor	Hopkinsville	March 7, 1968
Jones, William Henry V.	Louisville	December 15, 1967
Kelly, Griffen C.	Louisville	February 26, 1968
Kirk, J. Allen	Louisville	August 12, 1968
Kurre, Joseph Henry	Owensboro	January 28, 1968
Martin, William Curry	Louisville	July 8, 1968
McEver, Edward Allen	Williamsburg	December 12, 1967
Meredith, Thomas Overton	Harrodsburg	October 8, 1967
Morgan, Herman Harvey	Maysville	November 8, 1967
Moorman, Chapman S.	Louisville	May 23, 1968
Page, Marion Wesley	Sikeston, Mo.	December 25, 1967
Parrigan, Oliver Hazard	Monticello	August 24, 1967
Pauly, Leonard R.	Ft. Wayne, Ind.	November 13, 1967
Peters, John R.	Glendale, Calif.	February 13, 1968
Phillips, Milton Miller	Crab Orchard	October 19, 1967
Porter, Richard Charles	Louisville	September 2, 1967
Ramsey, Barton L. Jr.	Somerset	November 24, 1967
Ritter, Harry N.	Louisville	August 11, 1968
Rizk, Paul F.	Grayson	September 29, 1967
Robinson, Benjamin F.	Ft. Lauderdale, Fla.	June 25, 1968
Sanders, Roy	Dorton	July 1, 1968
Shiflett, Emory Lee	Louisville	January 1, 1968
Smith, Alfred Frank	Georgetown	December 24, 1967
Spurling, Roy Glenwood	La Jolla, Calif.	February 7, 1968
Sweets, Henry H. Jr.	Hannibal, Mo.	April 11, 1968
Taylor, Neil Edison	Ft. Thomas	
Treherne, Alfred James	New Orleans, La.	January 27, 1968
Tydings, Charles O.	Fern Creek	November 11, 1967
von Linde, Manfred Graf	New York City, N.Y.	March 26, 1968
Way, Stewart C.	Palo Alto, Calif.	November 20, 1967
Weaver, Logan Mitchell	Bowling Green	July 3, 1968

The reports of the officers and committees were presented by the Speaker and then referred to the respective reference committees as follows:

Report of the President—Reference Committee No. 1

Report of the President, Woman's Auxiliary to KMA—Reference Committee No. 1

Report of President-Elect—Reference Committee No. 1

Report of the Speaker of the House—Reference Committee No. 1

Report of Chairman, Board of Trustees—Reference Committee No. 1 with the following exception: Page 7, paragraph 3 through page 8 italicized portion only, referred to Reference Committee No. 6.

At this time, Richard F. Grise, M.D., Bowling Green, Chairman of the Awards Committee, was recognized to present his committee's nominations for the Distinguished Service Medal and the Outstanding General Practitioner Award. Charles A. Wathen, M.D., London, was nominated for the Outstanding General Practitioner Award. A motion was made, seconded and carried to accept this nomination.

Doctor Grise then reported that his committee had received the names of two physicians as nominees for the Distinguished Service Medal, and that the committee felt both these physicians were equally qualified and deserving of this high honor. Because of this fact, Doctor Grise said that his committee was unable to arrive at a single nominee for presentation to the House and desired to have the House at this time select the recipient.

Doctor Grise presented these two names alphabetically, and for the benefit of the members of the House in making this selection, he read biographical sketches of each. The nominees were: Branham B. Baughman, M.D., Frankfort, and Carl H. Fortune, M.D., Lexington.

After the tellers had distributed, collected and counted the ballots, Chairman Payne announced that Doctor Fortune had been chosen by the House as the recipient of the Distinguished Service Medal. The members of the House rose in tribute to Doctor Fortune.

The speaker then announced the following referrals:

Report of the Secretary—Reference Committee No. 1

Report of the Editor—Reference Committee No. 1

Report of the Treasurer—Reference Committee No. 1

Report of the Delegates to AMA—Reference Committee No. 1

Report of the Executive Secretary—Reference Committee No. 1

Report of the Judicial Council—Reference Committee No. 6

Rural Kentucky Medical Scholarship Fund—Reference Committee No. 6

Board of Directors, Kentucky Physicians Mutual, Inc.—Reference Committee No. 4

Scientific Program Committee—Reference Committee No. 2

Scientific Exhibits Committee—Reference Committee No. 2

Committee on Medical Education—Reference Committee No. 2

Sub-Committee on Coronary Care Units—Reference Committee No. 2

Hospital Committee—Reference Committee No. 2

Educational Television Committee — Reference Committee No. 2

The House enjoyed a fifteen minute recess with a coffee break provided by the Kentucky State Association of Medical Assistants, after which Doctor Greathouse continued the assignment of the reports to the various reference committees.

Disaster Medical Care Committee—Reference Committee No. 2

Cancer Coordinating Committee—Reference Committee No. 2

Advisory Committee to Blue Shield—Reference Committee No. 4

Advisory Committee to Blue Cross—Reference Committee No. 4

Committee on Occupational Health, Physical Medicine, and Rehabilitation—Reference Committee No. 4

Maternal Mortality Study Committee—Reference Committee No. 4

Advisory Committee to Selective Service—Reference Committee No. 5

Committee to Study the Constitution and Bylaws —Reference Committee No. 6

Interim Meeting Program Committee—Reference Committee No. 6

McDowell House Board of Managers—Reference Committee No. 6

Memorials Commission — Reference Committee No. 6

Committee on Legislative Activities—Reference Committee No. 3

Committee on Communication and Health Education—Reference Committee No. 4

Committee on Health Careers—Reference Committee No. 4

Committee on Community and Rural Health—Reference Committee No. 4

Cults Committee—Reference Committee No. 4

Senior Day Committee—Reference Committee No. 4

Committee on School Health, Physical Education and Medical Aspects of Sports—Reference Committee No. 4

Advisory Committee to Woman's Auxiliary—Reference Committee No. 4

Coordinating Commission on Governmental Medical Services—Reference Committee No. 5

Technical Advisory Committee on Indigent Medical Care (Title XIX)— Reference Committee No. 5

Advisory Committee on Title XVIII, PL 89-97—Reference Committee No. 5

Governmental Contracts Review Committee—Reference Committee No. 5

Committee on Appalachian and OEO Programs—Reference Committee No. 5

Ad Hoc Study Committee for Improved Community Health—Reference Committee No. 4

New Business

New business was presented to the House and referred to reference committees as indicated below:

(A) Resolution from the Board of Trustees relating to Osteopathic Physicians—Reference Committee No. 6

(B) Resolution from the Board of Trustees on the subject of Appreciation of Legislative Activities—Reference Committee No. 3

(C) Resolution of the Committee on Cults pertaining to Physician Candidates for Kentucky General Assembly—Reference Committee No. 3

(D) Resolution of Fayette County Medical Society relating to Credit Arrangers—Reference Committee No. 4

(E) Resolution from Fayette County Medical Society on the subject of KMA Participation in National Meetings—Reference Committee No. 1

(F) Resolution of the Fayette County Medical Society relating to Insurance Forms—Reference Committee No. 4

(G) Resolution of Fayette County Medical Society pertaining to Osteopathic Physicians—Reference Committee No. 6

(H) Resolution of Nelson County Medical Society on the subject of Feasibility Study of a KMA Comprehensive Health Plan—Reference Committee No. 5

(I) Resolution of Henderson County Medical Society relating to Home Health Care—Reference Committee No. 4

(J) Resolution of Fayette County Medical Society relative to Glaucoma Medication—Reference Committee No. 5

(K) Resolution of the Jefferson County Medical Society on the subject of Annual Registration of Licenses for Physicians—Reference Committee No. 4

(L) Resolution of the Jefferson County Medical Society concerning the AMA Executive Vice President—Reference Committee No. 1

(M) Resolution of McCracken County Medical Society relating to Physicians on Hospital Boards of Trustees—Reference Committee No. 4

(N) Resolution of William VonderHaar, M.D., Jefferson County Medical Society, on the subject of Educational Television—Reference Committee No. 2

Speaker Greathouse announced the meeting places for the Nominating Committee for general officers and the five trustee districts. He also pointed out that all 15 trustee districts should meet to select a nominee for the position of Alternate Trustee in the event the Constitutional change introduced at this first session is approved on Wednesday night. He indicated the signs numbered from one to 15 around the room as the locations for the meetings of the trustee district nominating committees. Doctor Greathouse stated that the Nominating Committee would report immediately at the close of the first scientific session on Tuesday morning at the Convention Center and again at the second meeting of the House on Wednesday. According to the Bylaws, additional nominations may be made from the floor on Wednesday without discussion or comment.

Doctor Scheen was called upon for final announcements. The Secretary reminded the Reference Committee Chairmen of their luncheon at noon today and reemphasized the point of being on time for the scientific sessions on Tuesday morning. It was also explained that reference committee reports would be available to the members of the House at 4:00 p.m., Wednesday, outside the Terrace Room.

The first session of the House was adjourned at 11:20 a.m.

Second Session

Doctor Greathouse called the second session of the House of Delegates to order on September 25 at 7:35 p.m. Thornton Bryan, M.D., Cadiz, a member of the Credentials Committee, reported that a quorum was present. The invocation was given by Donald Chatham, M.D., Shelbyville.

Walter L. Cawood, M.D., Ashland, Chairman of the Board of Trustees, was recognized to present the final report of the Board of Trustees. Doctor Cawood read the following resolution, passed by the Board of Trustees at its September 25 meeting, and moved its adoption. The motion was seconded and carried.

WHEREAS, the 1968 KMA Annual Meeting has made a substantial contribution in the field of continuing medical education and has been well received, and

WHEREAS, many individuals, organizations and agencies including guests and state essayists, scientific and technical exhibitors, newspapers, radio and television stations, hotels, and the Convention Center, have contributed to its success, and

WHEREAS, the closed circuit color TV sponsored by Smith, Kline and French Laboratories has made a valuable contribution to our meeting, now therefore be it

RESOLVED, that this House of Delegates goes on record as expressing its deepest appreciation to all individuals and organizations who have had a part in the development and implementation of the 1968 Annual Meeting.

A second resolution passed by the Board on September 25 was read by Doctor Cawood as follows:

WHEREAS, the quality and effectiveness of the medical skills and the ability of the graduates of the University of Louisville School of Medicine is of a most desirable type and quality, and

WHEREAS, the primary purpose of the University of Louisville School of Medicine is the teaching of medical students to become Doctors of Medicine, and

WHEREAS, the Dean of the University of Louisville School of Medicine has consistently demonstrated administrative policies consistent with this primary purpose, and

WHEREAS, the present Administration has been subject to malicious and unwarranted attack, therefore, be it

RESOLVED, that the House of Delegates of the Kentucky Medical Association does hereby voice its approval of the administrative policies of the present Dean of the University of Louisville School of Medicine.

Doctor Cawood moved the adoption of this resolution. Motion was seconded. The Speaker called for discussion. During the discussion, the following amendment was made and seconded: that the third "Whereas" be amended to read: "the Dean of the University of Louisville School of Medicine has greatly upgraded the quality of graduates of the University of Louisville School of Medicine, and"; to delete the fourth "Whereas"; and to amend the "Resolve" as follows: "That the House of Delegates of the Kentucky Medical Association does hereby offer the good offices of the KMA to assist in any way to help ameliorate the difficulties allegedly present at the University of Louisville School of Medicine".

After a lengthy discussion on the resolution itself and the above amendment, the question was called on the amendment, and it was defeated. The original motion as presented was voted upon and carried.

Doctor Scheen gave the announcements for the evening, recognizing these representatives of surrounding state medical associations: Patrick J. V. Corcoran, M.D., Evansville, Indiana, President-Elect, Indiana State Medical Association; David N. Kerr, M.D., St. Louis, Missouri, President, Missouri Medical Association; Edward Cannady, M.D., East St. Louis, Illinois, President-Elect, Illinois State Medical Society; Richard W. Corbitt, M.D., Parkersburg, West Virginia, President, West Virginia State Medical Association; and L. C. Meredith, M.D., Elyria, Ohio, Past President, Ohio State Medical Association.

Following these introductions, the reports of the Reference Committees were heard.

REFERENCE COMMITTEE NO. 1*

Thomas L. Heavern, M.D.,
Highland Heights, Chairman

Reports of the Officers and Board of Trustees

**In order to make the Digest of Proceedings of the second meeting of the House of Delegates more understandable and because it will occupy less space in The Journal, the KMA Board of Trustees passed the following motion "that if no dissenting action on the committee's recommendations is made either by the committee or the KMA Board of Trustees, only the reference committee action on the report be printed in The Journal".*

Reference Committee No. 1 considered the following reports:

1. Report of the President
2. Report of the President, Woman's Auxiliary to KMA
3. Report of the President-Elect
4. Report of Speaker of House
5. Report of Chairman, Board of Trustees
6. Report of the Secretary
7. Report of the Editor
8. Report of the Treasurer
9. Report of the AMA Delegate
10. Report of the Executive Secretary

Resolution E—KMA Participation in National Meetings

Resolution L—AMA Executive Vice President

Report of the President

I shall be forever grateful to you kind friends who permitted me to make a modest contribution to our profession by serving as your leader. I feel particularly honored to serve in these times of troubles, when we have been challenged politically, economically, and even it sometimes seems, morally. I hope you will recognize from the reports before you that we are making progress. We are past the stage of merely reacting to attacks, and are actively striving to exert guidance and leadership in the development of the future of medical care.

No words of mine can brighten the memory or acknowledge our debt to my friend of thirty years, Joe Sanford. We were fortunate in having the benefit of his experience to guide us in our re-organization. It is a portion of the measure of the man that he thought of our future by training his staff to carry on for us without him. Our debt to him is more than purely organizational. In his character, this dedicated layman set us an unparalleled example of the deeper virtues of the good physicians; kind, modest and inflexibly upright.

This has been our first year to operate under the restructuring developed by our Hoover Commission. The result is impressive. Approximately 40% fewer councils and committees have met; they have worked more diligently and intensively in areas that have been more important to us. Additional changes to improve our structure are proposed as constitutional changes. I strongly recommend that studies continue toward greater efficiency and responsiveness to KMA. Beyond all else, we must continue to explore the problem of effective medical leadership at the local level.

Our major effort this year has been in working with government, and our greatest involvement was in Frankfort. With a new minority-party Governor and an inexperienced and factionalized General Assembly, we were faced with the possibility of a disastrous session. I cannot commend too highly our members who helped make this session as successful as it was. The Committee on Legislative Activities, some of our Key Men and other members not even dignified with office united in a tremendous effort. Partisans to the core (as they need to be, to be effective) they willingly merged their efforts so that KMA could properly operate as a non-partisan group. No one sold us out for partisan interests. We emerged from the Legislative Session with much that was good and with nothing that was actively harmful. I recommend that the House continue the wise requirement that all legislative activity be coordinated through the Committee on Legislative Activities.

Through the efforts of our Technical Advisory Committee and our Board of Trustees, Title XIX services have been improved substantially. There is need for additional improvement. I feel that we must continue our efforts to convert Title XIX administration to a form of true health insurance, administered by professionals in the field. The path is long and hard, but only under these circumstances can the beneficiaries become truly first-class medical citizens.

Comprehensive health planning has been established on a sound basis at the state level. Whether it will be truly useful now depends on effective local medical leadership as it develops on a regional basis. I recommend that the trustees and delegates give a sense of urgency to local groups in developing firm and constructive guidance.

A combination of bureaucratic sloth and inadequate local medical leadership has prevented any realization of the high hopes for the Regional Medical Program, except in a single bright spot in Western Kentucky.

Having disregarded our specific and accurate predictions about the spiral costs that would follow Medicare, government is now noisily joining with us in concern about health care costs. This justifies a brief review to put this problem in perspective.

Before Medicare, increasing disposable consumer income (and other funds) were competing for increasingly scarce health care resources. Pharmaceuticals are almost the only item in the health care industry that are elastic in supply in response to quick swings in demand. Hospital beds and nurses specifically cannot be rapidly increased to meet a rapid increase in demand. When government added the Medicare billions to the already inflating health care system, it fired the boiler to super heat, a demand-pull inflation. I weary you with this economic dissertation only to make the point that, over the short term, neither we nor government are going to be able to significantly influence the rising total health care cost.

As an organization, we have long supported health career recruitment. We can encourage our members to be thoughtful in holding down costs, but the individual physician can make but small contribution to the overall problem. He can exert some control over bed utilization and the utilization of his own services; he can exert a lesser influence on the cost of medication to his patient. He can contain his fees within the range of his own increased costs, but the sad arithmetic is that if all physician fees were automatically either increased or decreased by 25%, the overall health cost picture would not be significantly influenced. A more significant contribution could be made by government, if government would divert its expenditures from health care *services* to health care *facilities*.

In the face of these dreary economics it is encouraging to direct your attention to the Report of our Advisory Committee to Blue Shield. Blue Shield has been able to improve benefits and decrease premiums in some of their prepaid contracts. This committee also recommends that we take action in a particular aspect of physician fees—the policing of "usual and customary". We have already established mechanisms for handling "usual and customary" in the areas of Title XIX and other government programs, and I earnestly recommend that we consider thoughtful action on an overall basis. I have faith in 90% of all physicians, but we need to develop effective monitoring methods for the remaining 10%. A most pressing element in this problem is the lack of any effective method of reaching non-member physicians.

During this year, I have asked many of our members to sacrifice their time and thought in undertaking tiring and sometimes unpleasant duties for our Association. The wonderful support they have given me is evidence of a rising *e' sprit de corps*. The President-Elect, and the Vice Presidents have been most helpful when I was faced with the difficult task of being in two places at the same time.

With all of this wonderful support, I have been able to represent you at the meetings of four of our neighboring state medical associations, the Congressional Dinner in Washington, twelve of our trustee district meetings, the Senior Day Programs, and

at apparently innumerable conferences with government and other agencies. A detailed diary is available for the Reference Committee and those who are studying further re-organization.

To the many who have contributed to give me a most enjoyable year, my deepest appreciation, and my firm prediction that, with such fine support, Doctor Henry Asman will lead us to a brighter and better year.

George F. Brockman, M.D., President
Kentucky Medical Association

Recommendations, Reference Committee No. 1

The Report of the President was reviewed with particular attention given to Doctor Brockman's comments concerning Comprehensive Health Planning. It is the feeling of the committee that this is an important area worth the attention of each member. The committee was impressed with the amount of work required of the president as indicated by the extensive itinerary submitted to the committee. The committee again recommends that consideration be given by the Board of Trustees to ways of lightening the load of the president and the more efficient use of the vice president or vice presidents to relieve the president of more routine functions. We wish to thank the president for his devotion to the Association and for his hard work during the past year.

Mr. Speaker, I move the adoption and implementation of this section of the report.

(Motion seconded and carried)

Report of the President of the Woman's Auxiliary

Having this opportunity to report for the Woman's Auxiliary to the Kentucky Medical Association is not only a pleasure but a responsibility. Reading through the state chairmen's reports and the county presidents' summaries of their year's work gave me inspiration and ample material. However, I do want to be sure to give full credit to all of our members for the wonderful work accomplished this year.

Many of the fine programs introduced over the state for the past few years have been continued. Some of the counties again this year are sending materials to the Frontier Nursing Service in Eastern Kentucky. The Veneral Disease program started last year is being continued in many counties.

The one new program introduced is the "Volunteer Friendly Visitor or Training Course." The information on how it is started and a program of colored slides with a narration on tape has been shown at district meetings and to several organized auxiliaries.

AMA-ERF contributions for our state reached a new high, with a total of $4,668.47 reported. Added to the sales of Christmas cards, stationery, jewelry and Dream Pets were ceramic Christmas trees, the Doctors Wife Rose and golf balls. The interest in this particular project is always good.

A total of eight Health Career Days was sponsored over the state. Thirty scholarships and loans are available in the amount of $5,800.00. The film, "Horizons Unlimited," has been purchased by one county and another county borrowed a copy of this film from the AMA Film Library to show to a group of Candy Stripers and to a church youth group.

Legislative activities in our state have been on the move for this year. From January through the first week in March, three visits were arranged by our state legislative chairman for the doctors' wives to visit Frankfort to see our legislators at work; and let them know how we felt about certain bills coming before the House and Senate. A special resolution from Fayette County Medical Society was sent in to the Kentucky Medical Association Headquarters commending our state legislative chairman and all the other members for their cooperation and interest shown.

Copies of an original print, by a well-known artist in Kentucky, were presented to county auxiliaries, who would have them framed and in turn present the picture to their local hospital. Fifteen counties participated in this project.

International Health Activities found many auxiliaries knitting leper bandages, making johnny coats, contributing money to be given for short wave equipment. Another county sent four station wagon loads of drugs and medical supplies to Equador through the Kentucky Alliance for Progress Program.

Although our membership is down for this year, we are trying to do something about the situation. At the spring Board meeting, three of our Board members prepared an Orientation Session for the wives of the new doctors who have recently moved into our state. Attractive flower arrangements, tea and cookies added to the hospitality of this meeting. One new county auxiliary was organized the latter part of April. The nine members having already been recorded as members-at-large could not be counted as new members.

Our state publication, the "Blue Grass News," has a new look this year. It is not only larger in size and print but it has been printed in a different color of ink. Many pictures have been used in each issue. Also, a doctor and his wife serving in similar positions, as county president or as councilor or trustee, have had their pictures along with a writeup on their medical activities in the "Blue Grass News."

Due to changes in our organizational structure from the national down to the state level, many auxiliaries have revised their county Bylaws.

One county purchased a filing cabinet and placed it in the doctors library at the local hospital to keep all of their auxiliary records and pictures. They also placed a glass showcase in the local museum and have collected medical articles of interest to display in the case.

One auxiliary gave $511.00 to the Opportunity Workshop in the community for mentally retarded people over the age of 16. Chances on a gift certificate of $1,000.00 were sold by one county auxiliary. The $2,034.00 gained from the sale of chances was placed in their loan fund.

A $1,000.00 donation was given by one auxiliary to their medical society to purchase a video tape recorder.

Doctor's Day was celebrated in a number of different ways from placing red carnations in the churches in honor of their doctors to planting the Doctors Wife Rose in garden spots.

Safety awards were given to junior and senior students by another county auxiliary.

Working with P.T.A., Red Cross, churches and other civic groups and charity drives account for many hours of volunteer time given by doctors' wives to their local communities.

From our largest auxiliary of 457 to our newest and smallest group of 9 members, there is plenty of evidence that if you want a task well done, give it to a medical auxiliary member.

The requests from KMA Headquarters which I accepted and enjoyed having the opportunity to fulfill, were helping to plan the Interim Meeting, speaking to the senior medical students at both the University of Kentucky and University of Louisville. Also, I was asked to assist with the program of Orientation for the doctors who had moved into our state recently. Certainly this was an opportunity to encourage these doctors to see that their wives become auxiliary members.

The increase in attendance and interest shown at our district meetings this year was most encouraging. Attending the special day of recognition for our political leaders in Washington was a highlight of this year. I went to San Francisco for the AMA Convention and was pleased to be one of the largest delegations from our state.

My year as president has been interesting and rewarding. To all Board members whom I have had the pleasure of working with and to the many auxiliary members over the state of Kentucky, I fully recognize the contribution you have made to the health and wealth of our Commonwealth of Kentucky.

Mrs. Charles Kissinger, President
Woman's Auxiliary to the
Kentucky Medical Association

Recommendations, Reference Committe No. 1

The committee reviewed the excellent Report of the President of the Woman's Auxiliary and wishes to commend her and the Auxiliary for the charitable activities and their devotion to the advancement of the medical profession in Kentucky.

Mr. Speaker, I move the adoption of this section of the report.

(Motion seconded and carried)

Report of the President-Elect

I am grateful for the opportunity to express once again my appreciation for the honor you conferred upon me in selecting me to serve as the President of our Association for the coming year. The sense of humility which I expressed in accepting this honor a year ago has been deepened in the months that have elapsed as I have viewed more closely the ability, the diligence and the untiring dedication of George Brockman. During this span I have also had time to reflect upon the leadership given to this Association by Bob Pennington, Everett Baker, and the other presidents under whom I have been privileged to serve as an officer of the Association for six years.

These men have set a high standard of excellence and I realize that, if I am to "measure up", I must depend on the continued guidance and confidence of this House and the Board of Trustees, and the continued diligence and cooperation of the many committees of the Association. This, I most earnestly seek!

This has been a year of accomplishment—and some frustration—as your President has reported to you. It has been a pleasure to work with George Brockman this year, and to represent him on occasion. As President-Elect, I attended the Annual and Clinical meetings of the AMA, as well as the Conference on Medical Practice, the Communications Institute, and the Conference on County Medical Societies staged by the AMA in Chicago. There have been innumerable committee meetings and informal conferences to plan activities of the Association for the coming year.

The problems and programs of the Association seem to grow in magnitude each year, and the workload of those charged with the responsibility of leadership and administration increases in proportion. It is a great challenge to you, to the Board, and to the officers to establish policies and to implement them so as to give the necessary priority to those which will enable us most effectively to accomplish the purposes of the Association and the goals we have set for ourselves.

Time does not permit, nor is this the place, perhaps, for me to set down my own thoughts on the areas which seem to deserve special attention during the coming year. These I hope to present, and elaborate upon, in the October issue of the Journal.

Henry B. Asman, M.D.
President-Elect of KMA

Recommendations, Reference Committee No. 1

The committee reviewed the Report of the President-Elect and wishes him a most successful year as president.

Mr. Speaker, I move the adoption of this section of the report.

(Motion seconded; carried)

Report of the Speaker

Again in 1968, we call upon all delegates to assume the important role of reviewing and studying all reports of the committees and officers of the state Association. We would suggest that you set aside one full evening for reading of these reports and reviewing same well in advance of the meeting date of September 23.

We will look forward to seeing you at the two major sessions of the House of Delegates, and the role you play and the interest you show in these two sessions will direct the activities of your state Association in the coming year.

We will have no change in the procedures governing the House this year. At the morning session on Monday, September 23, the officers will present their reports orally, and the committee reports will be available. There will be no council reports this year.

Each report is numbered, and any report may be presented orally if specifically requested. As they are received, they will be referred, by number, to a Reference Committee. Following this, any new business or resolutions which have been submitted seven days in advance of the meeting at the KMA Office may be introduced. These will be lettered alphabetically and referred to the Reference Committees. If you plan to introduce a new resolution on short notice, be sure and have enough copies for use by the House of Delegates on the day of the meeting.

The Reference Committees meet at 2:00 p.m. Monday to study these resolutions and reports. Due to a reduction in the number of committee reports, we will have only six Reference Committees this year instead of seven. There will be no change in the procedure for these committees to study the reports. They will stay in session until 3:00 p.m. or until everyone has been heard. After they have completed their hearings, they will prepare a report for presentation to the second session of the House of Delegates.

Each delegate will have available a complete copy of all Reference Committee reports at the second session of the House no later than 4:30 p.m. on Wednesday, September 25.

Remember that any motions longer than 20-25 words must be reduced to writing, preferably typewritten, with a copy handed to the speaker.

The final Wednesday night action on these reports will constitute the policy of the Association for the coming year. Again, we will follow Robert's Rules of Order in conducting the meeting.

It has been a pleasure to serve you in my capacity of Speaker of the House, and speaking for Doctor Cooper as Vice Speaker, we stand ready to help you with these problems in the future should you so desire.

Richard F. Greathouse, M.D., Speaker
Carl Cooper, Jr., M.D., Vice Speaker

Recommendations, Reference Committee No. 1

The Report of the Speaker of the House was considered by the committee. The committee expresses its appreciation to the Speaker and Vice Speaker for the efficient and orderly handling of the affairs of the House of Delegates.

Mr. Speaker, I move the adoption of this section of the report.

(Motion seconded; carried)

Report of the Chairman, Board of Trustees

As chairman of your Board of Trustees, I feel you can appreciate that my report must cover the activi-

ties of the Board of the 1967-68 Associational year in summary form in that the Minutes of the Board and the Executive Committee meetings for this past year total approximately 300 pages. The complete minutes are available in the Headquarters Office to any member.

During this year, your Board met four times in regular session with two more meetings scheduled during Sepember in conjunction with the Annual Meeting. The Executive Committee has met on six separate occasions.

I wish to express my appreciation to the members of the Board for their attendance, cooperation, diligence and outstanding performance during the past year. Our meetings have been lengthy and many problems have faced your trustees and officers during each session.

First Meeting, September 28, 1967

Rex Hayes, M.D., serving as temporary chairman, opened the meeting and introduced those members who had served on the Board previously but were in new positions as follows: Henry B. Asman, M.D., President-Elect; William W. Hall, M.D., Trustee from the Second District; and J. Campbell Cantrill, M.D., Trustee from the Ninth District.

Others re-elected to positions formerly held were Donald Chatham, M.D., Seventh District Trustee; Walter L. Cawood, M.D., Thirteenth District Trustee; John C. Quertermous, M.D., AMA Delegate; Charles C. Rutledge, M.D., AMA Delegate; and David B. Stevens, M.D., AMA Alternate Delegate.

Elected by the House of Delegates the night before to serve on the Board were: S. Randolph Scheen, M.D., Secretary; Glenn W. Bryant, M.D., J. Sankey Williams, M.D. and Luther M. Wilson, M.D., as the three vice presidents; Andrew M. Moore, M.D., Tenth District Trustee and Daryl P. Harvey, M.D., AMA Alternate Delegate.

Doctor Cawood was elected chairman of the Board by acclamation, and George Sehlinger, M.D. was elected vice chairman.

The Executive Committee was formed when E. C. Seeley, M.D. and Douglas Jenkins, M.D. were elected from the Board to serve with the president, president-elect, chairman, vice chairman and secretary as provided in the Bylaws.

The Board then elected personnel for membership on the KMA committees for the 1967-68 Associational year.

Following remarks by the new KMA president, the Board nominated two members for appointment on a Feasibility Study Committee (for usual, customary and reasonable fees under the Title XIX program) prior to adjournment.

Second Meeting, December 7, 1967

The December 7 meeting of the Board of Trustees opened with reports presented by the KMA president, George F. Brockman, M.D. on his activities representing the Association, the Headquarters Office Report presented by Secretary Randolph Scheen, M.D. and J. Thomas Giannini, M.D., senior delegate to the AMA reporting on the 1967 Clinical Meeting of the American Medical Association. The Board then approved recommendations from the Committee to Study Improved Community Health to establish local planning committees.

Due to quick action in the Legislature, a special committee was established to advise the Legislative Committee. It was also agreed that the Fayette County Society request to set up a first aid booth during the Legislature be approved if details of the plan could be worked out.

Disapproval of the new form initiated by the Department of Health concerning birth and death certificates was expressed by the Board with the request that the KMA delegates to the AMA introduce a resolution on this subject at the June AMA Convention.

A thorough discussion was held on the Title XIX program in Kentucky. Following consideration of the resolution passed by the 1967 House of Delegates calling for a private fiscal agent for Title XIX, the chairman of KMA's Technical Advisory Committee on Indigent Medical Care presented a complete report on the current status of the Title XIX program and the proposed changes scheduled for early 1968, including the plans for changing to "usual and customary" for reimbursement of physicians' services.

AMA Board of Trustees member, Robert C. Long, M.D., then reported on several matters of AMA policy that were of interest to the KMA Board.

In a discussion concerning health planning for Appalachia, it was pointed out that physician representatives on the Advisory Health Planning Council were appointed without consultation with organized medicine. It was felt that KMA should be consulted in future appointments of this nature. The next action of the Board was to make nominations to the governor to fill a vacancy on the State Board of Health.

A number of committee recommendations were submitted for appropriate action along with information on reports on committee programs. Andrew Moore, M.D., trustee from the 10th District and chairman of the 1968 Conference on Medical Education, reported that the conference would be held at the Park Mammoth Resort on January 26-27 and that program planning had been completed. In addition to inviting members of the Board, authorization was given for the invitation of specific guests to the conference.

The Cancer Coordinating Committee received approval of their requests that KMA give continued support to the State Cancer Registry and other recommendations to set up a workable program in the consolidation and reporting of information to the State Cancer Registry. It was pointed out that since the duties of the Mental Health Committee have been consolidated into the overall responsibility of the Committee on Community and Rural Health, assurance should be made that liaison between KMA, the Kentucky Department of Mental Health, and the Kentucky Mental Health Association be maintained. This responsibility was assigned to the Community and Rural Health Committee and Logan Gragg, M.D., was appointed to the committee to assist in this purpose. In separate action, the Board reconstituted the KMA Maternal Mortality Study Committee.

The Board approved a recommendation from the KMA Committee on Medical Education requesting that a letter be written to the AMA in opposition to the relocation of the AMA Institute on Biomedical Research.

David Stevens, M.D., explained that the United Presbyterian Mission Board had voted to close the hospital it had supported at Frenchburg, Kentucky. A discussion surrounding the incidents leading to this action preceded a motion which was approved directing that officials of KMA correspond with the United Presbyterian Mission Board presenting background informaiton relative to the need of the hospital in that area and inquiring if it would be possible to reopen the institution.

The Board expressed concern that an emergency medical service plan, required for each state as a result of the Highway Safety Act, was initiated in Kentucky without consultation with KMA although it had been understood that the KMA Disaster Medical Care Committee would be consulted. In other committee action, representatives of KMA to the Student AMA Chapters at the Universities of Louisville and Kentucky were appointed and the School Health, Physical Education and Medical Aspects of Sports Committee was reconstituted.

Third Meeting, April 17, 1968

The third meeting of the Board opened with the adoption of a resolution relating to the death of Mr.

J. P. Sanford, KMA Executive Secretary. This was followed by routine reports.

The Board then considered nominations to submit to the governor for membership on the Hospital Licensure Council and the Advisory Council on Medical Assistance and made its selections.

A lengthy discussion was held on Title XIX in Kentucky and Resolution F passed by the House of Delegates in September, 1967, which pertained to the payment of usual and customary fees for services to patients both in and out-of-hospitals. A detailed explanation was made of all events that had taken place on this matter since last September, the current status, and projected plans of the Title XIX program. A motion was then passed to implement Resolution F by writing to the membership if a satisfactory solution was not obtained within two weeks.

The next action of the Board was to accept a report from the KEMPAC Board Chairman, John C. Quertermous, M.D. and to defer action on the KMA Hospital Committee recommendations until August.

A resolution regarding KMA staff was approved and the Budget Committee presented its report for the proposed 1968-69 budget. Following an explanation that the Budget Committee and the Executive Committee had spent considerable time on the proposal and the fact that there were no radical changes being proposed, the new budget was adopted.

A report on the mumps vaccination program in Campbell County was accepted for information. Brief comments on AMA activities were made by AMA Trustee Robert C. Long, M.D. KMA President Brockman then reminded the trustees that they should submit recommendations on redistricting of trustee districts so that a plan could be formulated in July for presentation to the House of Delegates in September.

Appropriate action was taken on a request concerning the Fair Labor Standards Act and the KMA legal counsel was requested to publicize information on this subject through the medium of *The Journal.*

Fred C. Rainey, M.D., Chairman of the Legislative Committee for State Affairs, presented a report on the 1968 Kentucky General Assembly, noting that 10 percent of the 1,200 bills introduced had medical implications. Following his comments, the Board approved a resolution expressing appreciation for all of those individuals who worked so diligently on legislative matters and further accepted for information similar resolutions passed by the Fayette County Medical Society.

A recommendation from the Health Careers Committee that it be authorized to investigate various methods of obtaining funds for the establishment of a Health Careers Council was acted upon favorably. Expression of appreciation was made to the Southeastern Surgical Congress for a contribution to the McDowell House and changing the name of the KMA Journal to "Kentucky Medicine" was authorized.

Because he had dedicated his life and energies toward the betterment of Kentucky medicine, the Board approved a motion that the Headquarters Office Building be named for Mr. J. P. Sanford and that a dedication ceremony be conducted during the 1968 KMA Annual Meeting. It was pointed out that the building became debt free on April 15.

Final action taken was to authorize the introduction of a resolution to the AMA House of Delegates in June protesting the use of the recently revised birth certificate.

Fourth Meeting, August 15, 1968

The primary purpose of the August meeting of the Board was to review the reports of all the committees. In accordance with KMA policy, Board action was taken on these reports prior to their being submitted to the House of Delegates. A number of committee chairmen were present to discuss their reports and members of the Board had been assigned specific reports for a thorough study prior to the August 15 meeting.

Routine presentations received by the Board included those of the President, Secretary, Senior Delegate to the AMA, and the AMA Board of Trustees member, Robert C. Long, M.D., Louisville. Earlier in the session, the Board approved a motion to enthusiastically support Doctor Long for election to the office of AMA President-Elect at the appropriate time.

Comprehensive Health Planning received considerable discussion with plans outlined to initiate local action by physicians in the forming of Comprehensive Health Planning Councils. The Board also authorized the introduction of two resolutions to the House of Delegates on legislative activities and one on osteopathic physicians.

In other action, the Board (1) selected its Judicial Council nomination for presentation to the House of Delegates; (2) accepted an Executive Committee report voting that the 1969 Interim Meeting would be held in Lexington; (3) received a report from the President-Elect, Henry B. Asman, M.D., relative to plans for the forthcoming Associational year; (4) selected September 18-20 as Annual Meeting dates for 1973; (5) re-elected the editors of the KMA Journal for a two-year term, and; (6) approved nominations to the KEMPAC Board.

Other items considered by the Board for appropriate action included a proposal for health facilities planning in Frenchburg, Kentucky, and an ambulance attendant training project in Harlan. The Board also accepted for information a Hospital Committee report whereby proposed state health department teams would visit hospitals in Kentucky to check compliance with hospital licensure regulations.

The meeting adjourned after dates were selected for three sessions of the Board during the KMA Annual Meeting.

Walter L. Cawood, M.D., Chairman
Board of Trustees

Recommendations, Reference Committee No. 1

The committee was impressed with the great amount of work handled by the Board of Trustees during the past year. The committee discussed the failure of consultation by the health planning agencies with organized medicine in such areas of mutual interest as the Appalachian Advisory Health Planning Council and the Emergency Medical Services Plan of the Highway Safety Act. We feel that it is mandatory for the Board of Trustees to determine what specific steps should be taken to assure the timely involvement of organized medicine to the fullest extent in these areas.

The committee found the copies of the Minutes of the Board of Trustees meetings which were submitted for consideration most helpful. We recommend that this policy be continued.

Mr. Speaker, I move the adoption and implementation of this section of the report.

(Motion seconded; carried)

Report of the Secretary

This is my first report as Secretary to the Kentucky Medical Association. In preparing this report, I thought over long periods of time of original things which might be presented to the House of Delegates in this report. The fact remains, however, that it is the job of the Secretary to primarily report to you the facts and figures regarding the Association as well as the problems which relate to communication between the Medical Association and its members at large.

I must say that the first year has been quite an eye-opener for me. I have seen the statistics and read the reports of the previous secretary, Doctor Henry Asman, who would include in his reports the number of meetings, number of hours the meetings

were attended, how long the meetings lasted and the number of doctor miles involved. Let me assure you that these statistics are easy to glance over and not contemplate until you have actually observed these men in the business of running the Association as I have in this past year.

I have been impressed by the dedication, knowledge, good judgment and common sense with which the group of officers, Board members, and committee members have conducted themselves and your business. I am constantly amazed at the amount of knowledge which these men have regarding not only local and state affairs, but also national affairs which pertain to medicine. They give their time most willingly and spend as much time as is necessary to complete the business at hand at all of the Board meetings and any other meetings which I have attended.

To give you some statistics, I would like to explain to you the amount of time and effort contributed by numerous physicians in the working sessions of the Association. The KMA Board of Trustees has had four Board meetings which lasted a total number of 26 hours. There were 106 members at the meetings and 2756 doctor hours involved as well as 21,059 doctor miles traveled. The Executive Committee met three times. The meetings lasted a total of 21 hours with 19 members being present and a total number of doctor hours involved being 99. The number of doctor miles traveled was 3752. The total number of KMA meetings was 74 with 196 hours involved in meetings, 367 doctors attending, 933 doctor hours involved and 48,282 doctor miles traveled. It is easy to see from these statistics that you are being well represented and that the men whom you have placed in office and on committees are doing conscientiously the work which has been assigned to them.

As you know, the work of the Medical Association becomes more involved year by year. The numerous committees are constantly working. The Executive Committee, Board of Trustees and also the Judicial Council, which arbitrates any and all complaints, see them through to the best interest of both the doctor and the patient.

A point which Doctor Asman has always brought up in his reports, which I feel needs to be re-emphasized each year, is that you gentlemen are the elected delegates from your particular areas. It is your job to conscientiously attend the meetings and to report back to your county societies on the actions of the House of Delegates. If each of you attends the meetings and is diligent about carrying home the information and distributing same to your colleagues in your County Medical Society, then communication will have been established along the natural channels of the Society and a lot of the complaints which we hear from people who say they have no knowledge of major policies of the Association will have no basis for complaint.

As you know, we continue to send the Communicator to every member once a month and also the Journal of the Kentucky Medical Association carries much information which is important to every physician in this state. If every physician will read this material thoroughly, he will be well informed on what is going on in the Association and this will make him a better member of the Kentucky Medical Association.

I want to certainly give credit to the members of our staff at the Kentucky Medical Association, who always work long and hard and are willing to do anything at any time to further the interest of medicine and do what is best for the Kentucky Medical Association.

S. Randolph Scheen, M.D.
KMA Secretary

Recommendations, Reference Committee No. 1

The committee reviewed the Report of the Secretary and compliments him for his job well begun.

Mr. Speaker, I move the adoption of this section of the report.

(Motion seconded and carried.)

Report of the Editor

This has generally been a good year for the Journal of the KMA. The editors have continued to follow their policy of meeting on Monday mornings at 7:30 a.m., with Mr. Robert Cox and Mrs. Peggy Roberts to consider the material relating to the Journal. This includes correspondence, scientific articles, special articles, editorials, and business matters. It is a good group of people, and they work well together.

We of course miss Joe Sanford who over the many years made such a great contribution to the KMA Journal. The May issue of the Journal was dedicated to his memory.

During this past year, Doctor Charles C. Smith, Jr., of Louisville, became Scientific Editor of the Journal and has done an excellent job.

It has also been a good year from the standpoint of the number and quality of the scientific articles submitted for publication. Special articles from the students of the two medical schools were initiated this year. These have turned out to be stimulating and thought provoking.

The editors and the staff have considered changing the cover of the Journal and the name from the Journal of the Kentucky Medical Association to "Kentucky Medicine." This matter is still under consideration, and the editors would welcome reactions to this possible change in the title.

We extend our sincere appreciation to all of those who advertise in the Journal. We believe the quality of the advertising material is superior. In the January issue of the Journal this year, more advertising was carried than ever before in the Journal.

Walter S. Coe, M.D., Editor

Recommendations, Reference Committee No. 1

The committee studied the Report of the Editor and feels that the Journal has done well in the past year. The matter of a name change was discussed, and the committee feels that there may be some loss of identification of the Journal with organized medicine in Kentucky by such a change. We think final determination in this matter should be left to the discretion of the editorial staff.

Mr. Speaker, I move the adoption of this section of the report.

(Motion seconded; carried)

Report of the Treasurer*

I would like to call to the attention of the membership that the final payment on the KMA Headquarters Office building was paid in April of this year. It was originally anticipated that this would not be accomplished until 1971.

Available to all members of the Association is the completed report of the audit for the fiscal year ending June 30, 1968, at the KMA Headquarters Office, 3532 Janet Avenue, Louisville, Ky., 40205.

Keith P. Smith, M.D.
KMA Treasurer

Recommendations, Reference Committee No. 1

The Report of the Treasurer and accompanying figures were examined. A cursory examination of the figures seems to indicate a surplus of funds. However, it should be realized that this is a result of unstaffed positions and administrative changes in the past year. We think that the financial affairs of the Association are in good order.

Mr. Speaker, I move the adoption of this section of the report.

(Motion was seconded and carried)

(NOTE: Please see October Journal of KMA Organization Section page 917 for graph showing distribution of KMA funds.)

Report of Delegates to AMA

Your AMA delegates have attended the two sessions of the House of Delegates of the AMA respectively in Houston in November, 1967, and in San Francisco in June of 1968. The tone for the Houston meeting of November, 1967, was set by the dynamic president, Milford O. Rouse, M.D., when he called for a positive leadership in the AMA and evidence of visible action by the medical profession as a means of preventing further government take-over of the practice of medicine. Doctor Rouse stressed that this was not medicine's problem alone but that the future attitude of the nation towards free enterprise hangs in the balance depending upon our willingness to accept an overall community action program, both from the standpoint of the medical profession, and also as a community project. A major concern of this House at the November meeting was the Health Manpower Act and report which the government has set forth pertaining to overall manpower organization in the medical field throughout the country. This report was received too late for any action by the House of Delegates and it is recommended for your investigation pertaining to overall recommendations regarding health care in this nation.

Medicare and Medicaid were again brought to the attention of the House and the House reaffirmed its support for direct billing under federal programs and adopted a resolution regarding collection and public dissemination of figures of administrative costs of Medicare. It reaffirmed its belief of the physicians right to bill all patients, including Title XIX patients, and restated its position regarding reimbursement under usual, customary and reasonable fees for professional services. The House also reaffirmed in a resolution and requested the support of the Board of Trustees to seek additional ways for helping AMPAC enlarge its activities and its assistance to state medical political action committees as a very vital means of preventing further government domination of medical affairs.

The House resolved also a proposal of necessity of having physicians on hospital boards of trustees as a most effective means of liaison between medical staff and hospital governing authorities. Other organizational procedures adopted by the House concerning the president, president-elect and vice president were done from an organizational standpoint.

Also the House adopted a statement of 11 purposes and responsibilities of the AMA which were designed to define more clearly the overall purpose as written in the Constitution. These are submitted to you in their entirety.

1. By encouraging the further development of medical knowledge, skills, techniques and drugs; and by maintaining the highest standards of practice and health care.
2. By creating incentives to attract increasing numbers of capable people into medicine and other health-care professions.
3. By advancing and expanding the education of physicians and other groups in the health-care field.
4. By motivating skilled physicians who have the art of teaching to apply themselves to developing new generations of excellent practitioners.
5. By fostering programs that will encourage medical and health personnel to serve voluntarily in the areas of need for medical care.
6. By developing techniques and practices that will moderate the costs of good medical and health care.
7. By seeking out and fostering means of making all health-care facilities—physicians' offices, hospitals, laboratories, clinics and others—as efficient and economical as good medical practice and attention to human values will permit.
8. By combining the utilization of the latest knowledge for prevention and treatment with the vital healing force of the physician's personal knowledge of and devotion to his patient.
9. By maintaining the impetus of dedicated men and women in providing excellent health care by preserving the incentives and effectiveness of unshackled medical practice.
10. By maintaining the highest level of ethics and professional standards among all members of the medical profession.
11. By continuing to provide leadership and guidance to the medical profession of the world in meeting the health needs of changing populations.

The 117th Annual Convention of the AMA was held June 16-20, 1968 at the Fairmont Hotel in San Francisco. The opening session of the House of Delegates on Sunday afternoon was interrupted when two men seized the microphone at the front of the podium and insisted upon addressing the House. One was a senior medical student from Stanford and the other was a welfare worker and official of the Bay Area Poor People's Campaign. The Speaker of the House of Delegates, Walter Bornemeier, M.D., maintained order while the two men took turns speaking for a total of 13 minutes. On Tuesday a written statement was presented to the Speaker of the House setting forth the objectives of the Medical Committee on Human Rights, and it was read to the House as a matter of information.

The entire mood and pace of the AMA House of Delegates meeting in San Francisco was set when the President of the AMA, Milford O. Rouse, M.D., in his final report to the House at the opening session quoted Patrick Henry saying, "I know of no way to judge the future but by the past"—"to consider seriously the lessons of the past present significant challenges of the future". Doctor Rouse further said, "This growing affection for anarchy . . . this burgeoning attitude that any means, however violent, however distasteful, however destructive of the rights and property of others, is justified to reach an end desirable to a single group . . . must be changed if the progress of our nation is to continue." The AMA President said, "an honest 're-evaluation' of the way society's problems can best be solved in the interests of all of society is necessary".

Doctor Dwight L. Wilbur took the office of President of AMA in his home state. Doctor Wilbur pointed out that in the next 25 years we will see greater change than ever before in medicine. He indicated that the key question is who and what will shape public opinion to bring about the proper changes. Doctor Wilbur stated in his address that medicine's advice and role in the future will be successful only if it has the support of public opinion. He indicated that as physicians we have the ability, and we must not fail to act and assure leadership in the larger area of social and economic change.

A complete statistical summary of the meeting of the House of Delegates of the AMA might be stated as follows:

The House was in session for a total of 13 hours and 42 minutes. It handled 143 items of business which included 84 resolutions, 39 reports from the Board, 7 from the Council on Bylaws, 4 from the Council on Medical Education, 5 from the Council on Medical Service, 2 from the Judicial Council and 2 special reports. Of all these items, 14 were accepted or approved for information, 62 were adopted, approved or accepted, 31 were referred to the Board and/or councils and committees, 20 were replaced by substitute resolutions, 10 were rejected, 2 were postponed until the next meeting of the House, 1 was tabled and 3 were withdrawn. It is evident from this amount of business that your three Delegates and Alternate Delegates from Kentucky had to do a considerable amount of study in order to know what was going on. All of this business was divided among some ten reference committees for discussion and recommendation. Many physicians and staff people

assisted the Delegates in covering these reference reports and reporting back to our caucus meeting.

Before giving you a brief report of the actions by subject matter, let us report on the elections. Doctor Gerald D. Dorman of New York was named President-Elect. Doctors Walter C. Bornemeier of Illinois and Russell B. Roth of Pennsylvania, were re-elected to their respective posts of Speaker and Vice-Speaker. Four Trustees were elected to the Board as follows: Doctors L. O. Simenstad, Wisconsin; Raymond T. Holden, Washington, D.C.; John M. Chenault, Alabama; and John R. Karnodle, North Carolina. Doctor Walter H. Judd was elected to succeed himself on the Judicial Council. Doctor Robert B. Hunter was elected to the Council on Constitution and Bylaws; and for the Council on Medical Education, Doctors Francis L. Land and E. Bryce Robinson, Jr., were re-elected. To the Council on Medical Service were elected Doctors Burns A. Dobbins and Drew M. Petersen along with Doctor W. B. Hildebrand to fill the term of a Board member.

In an effort to be brief and concise for this report, we will state that of all the business handled, the subject matter might be organized and reported to you under nine general headings. Those headings with a brief comment are as follows:

Eliminating Discrimination

The Council on Constitution and Bylaws will draw up the necessary wording for a Bylaw amendment stating that in addition to receiving any appeals involving discrimination for color, creed, race, religion or ethnic origin, the Judicial Council shall, if it determines the allegations are indeed true, admonish, censure or in the event of repeated violations, recommend to the House of Delegates that the state association involved be declared to be no longer a constituent association of the AMA.

Health Care Costs and Financing

There was much discussion in this area and many resolutions and reports. A resolution urged that all state and local societies act swiftly in all instances of known exploitation and excessive charges for health care that may occur in their jurisdiction. It was agreed that adequate health care should be available to all who need it. A resolution was adopted with the principle of graduated income tax credits for premiums paid for health insurance and the House approved a recommendation that a technical evaluation of the full potentialities of the AMA in the field of economics of health care be carried out by a small advisory group of competent, nationally recognized economists. It is expected that this will be done promptly.

Legislation and Relationship with Government

The House adopted a Board report on comprehensive health planning, urging all states that have not already done so should have informational conferences on this subject and orient the medical profession at the local level. Physicians at the state and local level should have pertinent information and references on PL 89-749 and PL 89-239. The Board was authorized to create a Handbook on Prototypes of Community Planning for Health Services. The House said that government programs could not be ignored and that there is no easy solution to the dilemma of good medical care. The government is increasingly involved in research and experiments in the delivery of health services and also in the payment of care. There is a multiplicity of programs. The Council on Medical Service recommended and the House approved that societies may, after mature consideration, legitimately take part in government programs. The AMA should trust to the good sense of the individual state and county societies to recognize the serious import and the need for careful study before deciding on any steps to cooperate. The AMA requested the Secretary of HEW to continue to solicit the advice and counsel of practicing physicians designated by their medical associations in formulating future plans. In this area, they also approved a resolution that the AMA continue to espouse the private, fee-for-service practice of medicine and further resolved that the AMA strongly disapprove the provision of funds by the federal government for subsidizing any one form of organizational medical practice.

Major reports and resolutions were presented which involved the subject of "Legislation and the Relationship with Government". Among other subjects considered in this area was that the promotion of solo practice as well as group practice, extended care facilities, elimination of recertification ideas, continue to permit direct billing, the establishment of a separate department of health headed by a doctor, an AMA educational program on smoking and also government disaster programs.

Manpower

In response to a Board request, a new Council on Health Manpower was created. This replaced the old Committee on Health Manpower. This Council will work with all allied health professions in the recruitment of personnel. The Board report was approved to review studies of the status of foreign medical graduates in the hope of an organizational and financial support of a commission outside of government to coordinate fully all activities involving foreign medical graduates.

Education, Medical and Allied

Their report urged component societies to make every effort to give additional financial support to medical schools. Essentials of Approved Residencies pertaining to general practice, physical medicine and rehabilitation were revised. The House referred to the Board protests regarding the change of Essentials for Accredited Schools of Medical Technology by the pathologists and question of osteopathic physicians being admitted to hospitals for approved internship and residency programs. There was a resolution to establish a joint commission on accreditation of nursing schools with the AMA, AHA, ANA and the National League for Nursing.

Infant Mortality

The House approved a statement on infant mortality prepared by the Committee on Maternal and Child Welfare of the Council on Medical Service. This report said that we recognize the fact that unfavorable environmental and socio-economic factors as well as medical factors are involved in infant mortality. It said that the AMA should inaugurate and support programs of health education for good maternal and child health practices. Also good family life and sex education should be as a health care resource. The AMA should give impetus to the broad inclusive programs of care for unwed mothers. The AMA should provide leadership in programs to obtain national uniform registration statutes for births and deaths. In order to have truly comparable statistics, the AMA believes that there should be programs directed toward more accurate uniform reporting in this area. Regarding quality and availability of care, the report urged that state and component societies should evaluate existing care and take leadership in delivering services in locations where it is found to be deficient. The AMA has been asked to stimulate research into the cause and prevention of crib deaths.

Transplantation and General Thoughts on Patient Care

A Judicial Council report was adopted on ethical guidelines for organ transplantation. One of the important points here was that when a vital or single organ is to be transplanted, the death of the donor shall have been determined by at least one physician

other than the recipient's physician. Death shall be determined by the clinical judgment of the physician. The determination shall be made by all available, currently accepted scientific tests. The House approved a report regarding muliphasic screening programs, saying that they should be relatively simple, easy to administer and interpret. All such screening programs, the report said, should meet five basic criteria. These are reliability, validity, yield of information, cost, acceptance by physicians, individual laymen and the community. The Board was directed by the House to evaluate the practicality and feasibility of establishing a national health data banking system. In this general area the House adopted an emblem for slow-moving vehicles such as tractors and construction equipment. Members were encouraged to help alleviate architectural barriers to the handicapped and the medical profession was encouraged to educate the public in safeguards regarding the treatment of obesity. Local medical societies were encouraged to formally adopt the AMA policy statement on chiropractic as a health hazard posed by this cult.

Hospitals

Communication has been increased between physicians and hospitals through the new AMA publication entitled "Medical Staff-In-Action". A Board report was approved in noting that new Standards for Hospital Accreditation are under way by the Joint Commission on Accreditation of Hospitals. The Board was directed to ask the AMA Commissioners of the JCAH to arrange for the tentative draft of new standards to be submitted to the individual state associations for comment before final adoption. The House again urged that adequate representation of medical staffs be permitted on the voting membership of hospital governing bodies. The House recommended that JCAH, AHA, state and local societies be cautioned that the practice of medicine be preserved and the responsibility of the physician and that of para-medical personnel not be placed in the position of practicing medicine with or without consent by contract. In other words, contractural agreements should be carefully negotiated.

Public Relations

A Board report was adopted that reproduced a long statement by the AMA's public relations counsel, Mr. Philip Lesly. The title of this paper was "Considerations for Coping with the New Climate Involving Health Care". This report was approved, and it indicates that the foundations of public relations for the medical profession must be practical, positive, anticipatory on the initiative augmented by voices of laymen and selective. Selective, of course, means that AMA programs must have priority with the full knowledge that it will mean passing up many things that appear to need attention but are not as important on the priority list.

AMA Financial Status

As the last major subject heading, we may note that the House accepted for information a Board report concerning the fiscal uncertainties which lie ahead for the AMA. The report said that it is anticipated that a substantial increase in the budget of the AMA will be necessary within the next few years if the AMA is to fulfill its mission. Cost of printing and paper have been rising sharply and also there is the pressure of inflation. Also, this report stated that the tax effect of the IRS regulations is not known where the gross income of the AMA on its advertising is involved. The AMA received approximately $13 million annually from its advertising in its publications before deduction of costs and allowable expenses. The Board did not recommend any increase in dues at this time because it wanted additional information regarding various matters that affect the AMA's financial condition. The House adopted a resolution urging positive action to encourage reduction of the expenditures of the Association wherever possible.

Final Note

There were other miscellaneous actions such as changes in sections and section titles, constitution and bylaws, rules of order and procedures, awards for scientific work as always given by the AMA and reports from AMA-ERF as well as the Woman's Auxiliary and the Student American Medical Association.

Let me close by saying that your delegates from Kentucky to the AMA were kept busy as usual. I extend my appreciation to both Doctor John Quertermous and Doctor Charles Rutledge for their valuable assistance and also for the valuable assistance of our alternate delegates, Doctors David Stevens, Charles Bryant and Daryl Harvey. As always, we received valuable assistance from many other physicians attending the national meeting and from the society staffs.

J. Thomas Giannini, M.D.
Delegate to AMA

Recommendations, Reference Committee No. 1

The committee studied the Report of the AMA Delegate and commends Doctor Giannini for this comprehensive statement. The committee urges the Board of Trustees to quickly obtain all pertinent information concerning Comprehensive Health Planning so that individual trustees may schedule early informational conferences for orientation of the medical profession at the local level as called for by the AMA House of Delegates.

Mr. Speaker, I move the adoption and implementation of this section of the report.

(Motion seconded; carried)

Report of the Executive Secretary

I could not begin the report of the Executive Secretary for this year without first expressing some thoughts concerning the March 25 death of Joe Sanford who had served with unswerving dedication and untiring efforts as your executive secretary since 1951. It was my pleasure to have had the opportunity to work closely with him for his last six years, and I shall be ever grateful for the training and experiences he shared with me. He was both an effective leader and a close friend.

My appreciation has been expressed to the members of the Board of Trustees for their confidence in selecting me as your executive secretary during the Interim Meeting in Covington on April 17. In recognizing the challenge before me and in assuming this responsibility, I pledge to the Board, the members of the House of Delegates and the KMA membership that your desires will be fulfilled to the very best of my ability, and I shall strive for the continued growth of this organization in all of its endeavors.

In this new position, it has become even more obvious to me that the multitude of varied activities, their scope and depth as relates to the responsibility of the Headquarters Office, could never be presented to you in a single report. In fact, it would take a lengthy report to give you the complete details surrounding any one of KMA's programs.

In summary form, the following are the types of activities that keep your staff busy from day to day under appropriate supervision of committee chairmen, officers, and the Board of Trustees: The arrangements and promotion of such major meetings as the Interim and Annual Meetings; similar functions for special meetings such as the Senior Day programs, the Conference on Medical Education, and other sessions sponsored by KMA or in cooperation with an allied group.

A major workload evolves around the staffing of some 35 committees and implementing their projects and actions; continuing responsibilities as those allied with the monthly publication of the KMA Journal; the records keeping, promotion and presentation of the Orientation Course semi-annually; or the many facets of operating the Rural Kentucky Medical Scholarship Fund which has now loaned nearly $900,000 through its revolving account; the maintaining of close contact with our members through the travels of the field service division, the monthly publication of the Communicator, direct mailings, many daily telephone calls and an unlimited amount of correspondence received needing replies and often action; the continuous work required in legislative activities climaxed in a legislative year as was this year, and the daily growth of duties associated with governmental medical programs.

In addition are such time consuming matters as personnel recruitment, building and grounds maintenance, inventory of supplies, discussions with visitors almost daily, etc.

During this past Associational year, your executive staff has accumulatively attended nearly 150 committee and other KMA sponsored meetings, nearly 100 other meetings of related interest, and represented the Association by spending over 50 "staff days" at out of state meetings.

This has just briefly highlighted some of the activity in your Headquarters Office. I hope it helps to demonstrate that KMA is a valuable and working organization for its members and that it performs a most worthy service to all of Kentucky's citizens.

I would also like to report that the reorganizational structure of KMA, a recommendation of the Commission to Study the Reorganization of KMA last year, became effective during this Associational year with gratifying results. The discontinuance of the councils and a combining of committee duties decreased the number of committees and helped eliminate duplication and the overlapping of activities without hampering the attainment of any of our desired goals. The committee meetings were more meaningful and such "streamlining" appears to be an essential element for any progressive organization today.

I want to express a very special appreciation this year to the President, Chairman of the Board, Speaker of the House, Editors, Secretary, Treasurer, and other officers and the committee chairmen for their tolerance and understanding, their effective supervision and their time and counsel with staff.

We are pleased to introduce to you Mr. William T. Applegate, our new Executive Assistant on the staff. His duties will be many and varied and he will be working with a large number of our committees. As of this writing, we are conducting numerous interviews to fill another executive staff position, that of the Assistant Director of Field Service.

It is difficult for me to find words to express my deep gratitude to a loyal, efficient and dedicated staff. Particularly during this year, with both new employees and a change of responsibilities of other staff personnel, they have demonstrated their willingness to go beyond "the call of duty" to discharge their duties in a superb fashion.

Robert G. Cox
Executive Secretary

Recommendations, Reference Committee No. 1

The committee reviewed the Report of the Executive Secretary.

The committee feels that it would be appropriate for the House of Delegates to express to Mrs. Sanford that the House still keenly feels a deep sense of appreciation for the years of dedicated service that Joseph P. Sanford gave to this organization, its officers, and the individual members of the House of Delegates.

The committee congratulates Mr. Cox on his excellent efforts in conducting the affairs of the Association.

Mr. Speaker, I move the adoption and implementation of this section of the report.
(Motion seconded; carried)

Following the passage of this section of Reference Committee No. 1's report, the Speaker recognized Lee C. Hess, M.D., Delegate from Boone County, who made a motion that the House of Delegates stand and give a moment's recognition in memory of Mr. J. P. Sanford. The motion was seconded and carried. The members of the House rose for a moment of silent tribute to Mr. Sanford.

Resolution E

Fayette County Medical Society

WHEREAS, the quality of service rendered to the public and to our physicians by our state association depends in part upon the motivation, interest, and initiative of our physician leadership; and

WHEREAS, these qualities of leadership can be developed only through exposure to and education for the various activities involved; and

WHEREAS, the American Medical Association and related organizations provide national meetings of direct and vital interest to medical society activities; and

WHEREAS, the Board of Trustees and House of Delegates represent the official leadership of our association outside of the elected officers; therefore be it

RESOLVED: that sufficient funds and scheduling of participants be established by the Executive Committee so that a variety of trustees, delegates and/or officers can attend the various national meetings involved.

Recommendations, Reference Committee No. 1

Resolution E, KMA Participation in National Meetings introduced by the Fayette County Medical Society, was considered in light of the Constitutional requirements in Chapter IX, Section 3, concerning funding. With this in mind, the committee recommends that the Resolve be amended to read:

"*RESOLVED*: that scheduling of participants be studied by the Executive Committee so that a variety of trustees, delegates and/or officers can attend the various national meetings involved."

Mr. Speaker, I move the adoption and implementation of this section of the report.
(Motion was seconded and carried.)

Resolution L

Jefferson County Medical Society

WHEREAS, in September, 1968, a communication was received from the Board of Trustees of AMA that F. J. L. Blasingame, M.D., was terminating his service as Executive Vice President of the AMA; and

WHEREAS, Ernest B. Howard, M.D., has been named by the AMA Board of Trustees as acting Executive Vice President; and

WHEREAS, the permanent position of Executive Vice President will not be filled until after the Clinical Meeting of the AMA in Miami Beach, December 1-4, 1968; and

WHEREAS, the important role of the AMA in the daily life and future of each private practicing physician as well as the collective medical profes-

sion in determining the best medical care for all citizens in this country is well-known; and

WHEREAS, historically the AMA permanent staff has been headed by physicians, a policy which has been followed to insure the confidence of the individual physician member in the AMA; therefore be it

RESOLVED, that this Kentucky House of Delegates instruct its Delegates to the AMA to offer a resolution at the next AMA meeting to amend the By-Laws of the American Medical Association as follows. Amend Chapter XVII, Section 4, Paragraph (E) to read as follows:

"(E) Appoint an Executive Vice President, who shall be the chief executive officer of the association to manage and direct the activities of the association. *This officer as well as the Assistant Executive Vice President shall be a person who among his other attributes must be a graduate physician and licensed M.D."*

(Italicized sentence that which has been added as an amendment.)

Recommendations, Reference Committee No. 1

Resolution L, AMA Executive Vice President, submitted by the Jefferson County Medical Society, was studied at length by the committee which approves the resolution as written.

Mr. Speaker, I move the adoption and implementation of this section of the report.

(Motion seconded.)

In the following discussion, a motion was made and seconded to amend Resolution L by striking the following words from the Resolve: "a graduate physician and licensed M.D.," and inserting instead the following: "an active member of the AMA." After a lengthy discussion, this amendment was voted on and passed. The original motion as amended also carried.

Mr. Speaker, I move the adoption of the report of Reference Committee No. 1 as a whole as amended.

(Motion seconded and carried.)

Mr. Speaker, I wish to thank the members of the committee—Doctor Bosworth, Doctor Fox, Doctor Phillips, and Doctor Tillett—for their untiring efforts in the work of this committee in the preparation of this report.

I also wish to thank Mrs. Sandra Murphy for her able assistance in the preparation of the report.

REFERENCE COMMITTEE NO. 1

Thomas L. Heavern, M.D., Highland Heights, Chairman
N. Lewis Bosworth, M.D., Lexington
Mary Pauline Fox, M.D., Hyden
R. J. Phillips, M.D., Owensboro
Robert S. Tillett, M.D., Louisville

REFERENCE COMMITTEE NO. 2

C. C. Lowry, M.D., Murray, Chairman

Reports on Scientific Assembly and Medical Education

Reference Committee No. 2 considered the following reports:

14. Scientific Program Committee
15. Scientific Exhibits Committee
16. Committee on Medical Education
17. Sub-Committee on Coronary Care Units
18. Hospital Committee
19. Committee on Educational Television
20. Disaster Medical Care Committee
21. Cancer Coordinating Committee

Resolution N—Educational T.V.

Report of the Scientific Program Committee

Your Scientific Program Committee held three meetings, one in November, and two in December of 1967, to outline the plans for the 1968 Scientific Session. Since color TV is a featured part of our program this year, the moderators of the TV sessions have held three planning meetings with additional meetings scheduled with their TV participants prior to the actual TV presentation. Your chairman, and members of the KMA staff, have held countless telephone calls, numerous personal contacts and conducted an incalculable amount of correspondence in putting this program together.

Over seven hours of closed circuit color TV, under the sponsorship of Smith Kline and French Laboratories, should prove to be an interesting and educational highlight of the 1968 session. We have also continued the trend of having themes for portions of the three-day meeting, and these themes are carried over into the TV presentations. The themes are designed to assist in the continuity of the program and we hope are found to be profitable to the membership.

Your chairman had the pleasure of meeting with the presidents of the specialty groups who meet in conjunction with our Annual Meeting. Approval by the specialty groups of the facilities offered for their meetings and their cooperation in planning of the overall program was noted with gratitude.

We are pleased to again have the Southern Bell Telephone and Telegraph Company sponsor our Message Center in the Technical Exhibit Hall and wish to extend our appreciation to them. Each year, this continues to be a growing and valuable service to our Association and our members.

The members of the Scientific Program Committee strive to present an appealing and educational program that provides maximum benefit to the membership of KMA.

Previous programs are reviewed so that we can select the most popular aspects of these sessions to complement any new concepts presented.

Your chairman is most appreciative to all those who assisted in the formation of this program and notes especially the members of this committee, moderators and TV participants, specialty group presidents and program chairmen, and representatives of Smith Kline and French Laboratories.

Peter P. Bosomworth, M.D., Chairman

Recommendations, Reference Committee No. 2

We have studied the report of the Scientific Program Committee and realize that much work has gone into the preparation of this year's Scientific Program. We want to compliment the committee on the excellent program that has been arranged for this year's Associational meeting and to express the appreciation of the Association to Smith Kline and French Laboratories for their sponsorship of the color television program and to the South Central Bell Telephone Company for their continued sponsorship of the Message Center.

Mr. Speaker, I move the adoption of this section of the report.

(Motion seconded; carried)

Report of the Scientific Exhibits Committee

The Scientific Exhibits Committee met on July 18 to carefully review all applications which had been received for space in the Scientific Exhibits section at the 1968 Annual Meeting.

While response was again good this year, we would like to see more of our members present exhibits. It is anticipated that we will have approxi-

mately 20 exhibits for this year's meeting. These exhibits will be in place by 8:00 a.m. on Tuesday morning, September 24 and will not be removed until 3:30 p.m. on Thursday, September 26.

As has been done in the past, a special committee will judge these exhibits on Tuesday morning, September 24, and the most outstanding presentations will receive special awards. All exhibitors will receive special badges and a certificate will be forwarded to them following the meeting.

Members of this committee would like to express their appreciation to our exhibitors, both past and present, for their cooperation in making this program a success. We feel that their interest in this phase of continuing medical education is most important and hope that others will consider presenting a scientific exhibit in the future.

We would also like to take this opportunity to urge all members attending the Annual Meeting to visit the exhibits which will be located in the Convention Center between the Technical Exhibit Hall and the Scientific Sessions.

T. R. Marshall, M.D., Chairman

Recommendations, Reference Committee No. 2

We have read the report of the Scientific Exhibits Committee and not only wish to thank the committee but to express our appreciation to the exhibitors for their cooperation in making this program a success.

Mr. Speaker, I move the adoption of this section of the report.

(Seconded; carried)

Report of the Committee on Medical Education

The Committee on Medical Education met two times during this Associational year, November 30, 1967 and March 7, 1968.

The responsibilities assigned to this committee include: (1) studying and making recommendations on matters relating to PL 89-239 (Heart, Cancer & Stroke); (2) AMA-ERF; (3) control of the Kentucky Postgraduate Medical Education Fund; (4) liaison with the medical schools; (5) representation with the Student AMA at the medical schools; (6) representation by the committee chairman on the KMA Coordinating Commission on Governmental Medical Services.

At the meeting, November 30, the committee discussed in some detail the Ohio Valley Regional Medical Program, with no definite action being taken. PL 89-239 was again discussed at the March meeting, with discussion centering around the proposed operational grant. It was noted that continuing medical education at the postgraduate level appears to be one of the major foci of this program in this region, a position with which this committee is in agreement.

In regard to AMA-ERF, this committee recommended to the KMA Board of Trustees that a letter be written to the AMA Board of Trustees suggesting that the relocation of the Institute for Biomedical Research to the University of Chicago was not an appropriate disposition of these funds. This letter was written by the Board.

In regard to the two representatives to SAMA, two representatives of this society were asked to be representatives to SAMA so that there would be proper representation at the two medical schools in the Commonwealth. Doctor Hoyt D. Gardner was asked to be the representative to the University of Louisville and Doctor Donald Edger was asked to be the representative to the University of Kentucky.

The second biennial Conference on Medical Education was held at Park Mammoth, January 26-27, 1968; the planning for this and the discussion of the achievements involved some of this committee's time at both meetings. It was felt to be a successful conference, bringing together pre-clinical and clinical personnel in a discussion setting. The papers delivered at this conference have been presented in the KMA Journal.

The Postgraduate Medical Education Fund contains approximately $5,000 and no action was taken regarding dispersement of these funds this year.

As in the past, the committee wishes to express its appreciation for the cooperation of the members and the staff, with particular emphasis being given to the advantage of such a meeting place for both academic and non-academic physicians concerned with medical education.

Walter I. Hume, Jr., M.D., Chairman

Addendum to the Report of the Committee on Medical Education

Contact with the University of Louisville School of Medicine Chapter of the Student American Medical Association was maintained throughout the year. The usual projects and purposes were pursued. There is a considerable amount of national interest currently involving the Student Health Organization, a group formed of scattered campuses across the country which tends to project medical students' interests into the Domestic Peace Corp and the War on Poverty. They had a meeting at the Wayne University Campus in Detroit, Michigan for purposes of fermenting and collating a national organization which would be a rival group to the Student American Medical Association.

The Student Health Organization so far would not have a large number, although it would have several representatives on a number of campuses. These people's philosophies are those of the restless left and generally do not have overwhelming support, although they have activated some interest amongst the students and some of their projects. We have not felt any particular influence from this divergent group at the University of Louisville so far.

The Louisville Chapter of SAMA sent the usual contingency to the national convention held this time in Detroit, Michigan. Our boys working as they have in the past in close liaison with the University of Kentucky Chapter did well in the reference committees and the House of Delegates and conducted themselves in a creditable manner at this time. Clement Lucas of the University of North Carolina was elected as President of the SAMA, succeeding David Kendig of the University of Chicago.

The WASAMA Chapter at the University of Louisville has been active in several projects and has also done an aggressively good job this time and should be commended. It is most important to have these young ladies showing the kind of interest that is bound to make them good medical and civic citizens in the future as well as complement their husbands' careers.

Hoyt D. Gardner, M.D., KMA Representative
to University of Louisville SAMA

Recommendations, Reference Committee No. 2

Next we reviewed the report of the Committee on Medical Education and are in agreement that continuing medical education at a postgraduate level should be most important in this region. We want to thank the committee and accept their report as presented.

Mr. Speaker, I move the adoption of this section of the report.

(Seconded and carried.)

Report of the Coronary Care Unit Sub-Committee

This represents the first meeting of this newly organized sub-committee.

This committee was formed primarily to be of assistance to the Kentucky Medical Association—Kentucky Nurses Association Joint Advisory Committee to offer guidance in establishing, maintaining, and training personnel on coronary care units.

Discussion revolved primarily around the importance of having a patient that has suffered an acute myocardial infarction in an area whereby his electrocardiogram could be monitored and the ability to defibrillate or mechanically pace an individual patient or institute proper medication to prevent some fatal arrhythmia. The problems of the treatment of shock and congestive heart failure were considered, and in addition, consideration of getting the patient to this environment.

The conclusions reached at this meeting are as follows:

1. All hospitals should have means for monitoring the electrocardiogram of the patient with an acute myocardial infarction. (The number of such monitors is not specified).
2. The electrical means for defibrillation should be available in all hospitals.
3. Suggestions for training programs for coronary care units should be made available through this committee. (This should include reference material to be made available through the KMA and instruction in the use of the equipment advised for the hospital noted above.)
4. This committee will assume the responsibility of answering inquiries directed to the KMA on Coronary Care Units or the equipment related to these units.

Henry W. Post, M.D., Chairman

Recommendations, Reference Committee No. 2

We reviewed the report of the Sub-Committee on Coronary Care Units. We were in agreement with the conclusions of this sub-committee and accept the report as presented.

Mr. Speaker, I move the adoption of this section of the report.

(Seconded and carried.)

Report of the Hospital Committee

The members of your Hospital Committee have had another busy year with a considerable amount of our work resulting from the passage of Medicare, PL 89-97, which began its implementation in July 1965.

We have continued to maintain contact with the hospital-based specialists, particularly as to their status relating to Resolution A passed by the 1965 KMA House of Delegates, entitled "Administration Relationship Between Hospitals and Private Practitioners of Medicine Within Hospitals." We are pleased that no major problems have been reported to us during this Associational year.

Our "Dru Run" Hospital Accreditation visits, initiated in 1962, have continued to be available to the hospitals in the state. As the passage of Medicare increased our activity in this area, we made additions to the number of individuals available to our teams and wish to express our appreciation to these individuals for their time and effort. The "Dry Run" program is under the joint sponsorship of KMA, the Kentucky Hospital Association, and the Kentucky Association of Medical Record Librarians. In addition to "Dry Run" visits, we have met with representatives of hospital staffs and hospital Boards of Trustees to assist in seeking solutions to problems confronting the efficient operation of hospitals.

This year, the Department of Health, as a result of Medicaid and Medicare, increased their activity in the inspection of hospitals to attempt the enforcement of hospital licensure regulations. Our committee spent a long afternoon discussing this matter, some problems created, and the inspection methods that should be utilized. Our concern resulted in a number of recommendations being made to the KMA Board of Trustees concerning the State Health Department inspection teams, their method of operation, the cooperation and coordination of KMA and KHA and other policies concerning their inspections. The Board is scheduled to take action on these recommendations at their August 15 meeting.

The committee also took action on problems relating to the changes in the purchase of drugs or intravenous fluids by hospitals without consultation of medical staff or Pharmacy Committee approval. Other matters discussed were the operation of the emergency room, booklets on emergency rooms, staffing of emergency rooms, and surgical technicians.

We strive to maintain liaison at both the national and local levels and through the cooperative effort of allied groups to be of maximum service to you.

James B. Holloway, M.D., Chairman

Recommendations, Reference Committee No. 2

We next considered the report of the Hospital Committee and realize that they have had a busy year with increased work resulting from the passage of MEDICARE. We commend this committee on their efforts in trying to improve hospital care at all levels and accept their report as presented.

Mr. Speaker, I move the adoption of this section of the report.

(Motion seconded; carried.)

Report of the Educational Television Committee

The Educational Television Committee of the Kentucky Medical Association has met several times during the year, both as the committee and also as an expanded group involving representatives of the paramedical groups in the area. The digests of the proceedings of these individual meetings are available for the Board in the office. In summary though, the Educational Television Committee has met with the idea of trying to decide whether educational television might prove a useful tool for communicating postgraduate education for individual practitioners in the Kentucky Medical Association.

It was the opinion of the committee that educational television may well prove to be a very effective tool for postgraduate education and accordingly has combined with the areas of Lexington and Cincinnati to form a task force on educational television functioning under the Ohio Valley Regional Medical Program.

A portion of the initial operation grant application of the Ohio Valley Regional Medical Program includes a report of the task force on regional medical television, (page 83 of the Ohio Valley Regional Medical Program confidential grant application request). This grant application spells out in great detail the potential use of university television resources at the University of Cincinnati, University of Kentucky and University of Louisville, and further outlines the involvement of KMA's Educational Television Committee as it functions in this task force. OVRMP includes both closed circuit and open circuit television for component universities, University of Kentucky, University of Louisville and University of Cincinnati to the state educational television studios located on the campus of the University of Kentucky. These programs, either live or on closed circuit, can be transmitted through the state ETV network to all community colleges and to the twelve regional transmitters located throughout the

state, and could therefore give television coverage either live or on closed circuit to virtually the entire physician population in the state of Kentucky and in the surrounding areas close to the Cincinnati area. The use of video tape recorders to record and also to play back over smaller systems is also anticipated and funds for these have been requested. A Regional Medical Program Television Component requests many other in-depth services but suffice to say that the KMA's committee on Educational Television would function as a member of the task force on educational television of the Ohio Valley Programs with hopes that any program emanating from this group will serve primarily as a postgraduate means of continuing medical education for both physicians and medical personnel and may even be used as a medical news program for the lay public.

Continuous reports to the KMA Board of Trustees will of necessity be required as the Ohio Valley Program becomes funded for different phases. Then the participation of the KMA will have to be approved by the Board, and the KMA—ETV Committee proposes to keep the Board informed of the progress or other motions of the OVRMP Regional Medical Television services.

William P. VonderHaar, M.D., Chairman

Recommendations, Reference Committee No. 2

We studied the report of the Educational Television Committee and we believe that there is certainly a place for television in continuing our postgraduate education. We want to thank the Educational Television Committee for their excellent work during the year.

Mr. Speaker, I move the adoption of this section of the report.

(Seconded and carried.)

Report of the KMA Committee on Disaster Medical Care

The committee met several times during the past year. The attendance of the membership was exemplary. As has been the practice in the past, a number of guests representing private health agencies, local, state and Federal Government offices were invited to the meetings and asked to participate. These guests were included in distribution of the minutes of these meetings.

The program of highway identification of hospitals continues. In the very near future, 20 hospitals across the state located near the interstate highway system will be so marked on the interstate highway system.

Representatives of the American Red Cross have met regularly with the committee and discussed mutual problems in extending Red Cross basic and advanced first aid courses. The committee commends the efforts of the American Red Cross in this direction.

The Department of Health has now changed the location of a number of the packaged disaster hospitals. These emergency hospitals are now more closely affiliated with existing hospitals. This concept has always been advanced by the committee and it is gratifying to see action finally taken in this matter.

The committee heard reports from Doctor Reichert about the airplane disaster in Covington and the changes in community disaster planning which resulted.

The committee encouraged the cooperation between the State Department of Health and the Kentucky Dental Association for the Health Department to supply the Dental Association with equipment needed to easily and effectively identify the dead under disaster conditions.

During the course of the year the committee was told that the Emergency Health Resources Mobilization Plan for Kentucky has been approved. The committee was also told that the registration of physicians has begun but that as yet the listing is not being maintained in a current manner.

The committee prepared a program for color TV on emergency medical care for presentation at the 1968 KMA Annual Meeting.

The committee and the Department of Health in Frankfort have had considerable discussion about the medical aspects of the Highway Safety Act. Your committee was not consulted by the Department of Health although we made our offices available to them for preparation of the plan. The Health Department has stated that the plan has not been approved by the Federal Government as yet; however, approval is expected and the Department of Health has indicated it would ask KMA for assistance in implementation.

Because of the importance of emergency medicine in rural areas, it has been proposed that a meeting be held between the Disaster Medical Care Committee and the Rural Health Committee.

During the year the committee received a report that 184,000 people in Kentucky have been trained in medical self-help.

The committee prepared a brief outline on the medical aspects of civil unrest and this was presented in the Journal of the Kentucky Medical Association.

The preparation of first aid packs for use by flying physicians for distribution to areas where such supplies are needed on short notice is a problem of continuing interest to the committee and it is hoped that it can soon be completed.

A special meeting was held under the sponsorship of the committee on Transportation of the Injured. Doctor Hornaday served as chairman of this special committee and representatives of the American College of Surgeons, the Spindletop Research Laboratory, the State Police, Kentucky Dental Association, Kentucky Hospital Association, Health Facilities Planning Council in Louisville, and the Kentucky Highway Department were all present. It was the consensus of this meeting that the problem of transportation of the injured may well be a responsibility of the State Comprehensive Health Planning Council and the Regional Councils under that program. It is the intent of the committee to pursue the problem of improvement of transportation of the injured in such a manner.

William T. Rumage, Jr., M.D., Chairman

Recommendations, Reference Committee No. 2

We reviewed the report of the Committee on Disaster Medical Care and wish to compliment them on their excellent work. We also wish to especially commend them for sponsoring a program for color television on emergency medical care, which will be presented at this year's Associational meeting on Wednesday afternoon.

Mr. Speaker, I move the adoption of this section of the report.

(Seconded and carried.)

Report of the KMA Cancer Coordinating Committee

The Cancer Coordinating Committee met once formally during this Associational year and held a corollary meeting suggested by our first regular meeting. The main topics under consideration at both meetings concerned the coordination of cancer follow up and reporting in the fourteen approved Kentucky hospital cancer registries and the State Cancer Registry.

At the first meeting in October, 1967, representatives of the State Health Department were present to discuss the Health Department's request that the

committee make a recommendation as to whether or not to continue the State Cancer Registry. Continued support of the State Cancer Registry was recommended on the basis that it receive regular yearly reports of cancer cases and follow up information on cancer cases from the fourteen approved hospital cancer registries, so that this information can be consolidated, perhaps with computer aid, with the objective of reporting back to these hospitals in a useful, compact summary report of their own activities.

A month later, the committee met with directors and secretaries of the fourteen hospital cancer registries to review the details of coordination with the State Cancer Registry. Details and forms, cancer diagnostic nomenclature, coding systems and breakdown of final yearly results were thoroughly discussed. Some consensus on these points was reached. It was concluded that hospital registries would continue to report their cases with increased emphasis on follow up information and that the central registry would process them and report back yearly to the hospitals. These reports would be entirely confidential and one hospital would not know what any of the other hospitals are doing, and would only receive reports of their own material.

A detailed report was received by all members of the committee during the year from the division of Epidemiology of the State Department of Health showing considerable progress in the cervical smear screening program being conducted in various counties by the state. These programs are largely conducted by local personnel by various, different arrangements worked out by the local county health departments and county medical societies; they concentrate largely on the education of the medical indigent women to the value of cervical smears.

Condict Moore, M.D., Chairman

Recommendations, Reference Committee No. 2

We have reviewed the report of the Cancer Coordinating Committee. We wish to thank the committee for their excellent work and accept the report as presented.

Mr. Speaker, I move the adoption of this section of the report.

(Seconded and carried.)

Resolution N

William P. VonderHaar, M.D.

Jefferson County Medical Society

WHEREAS, the Kentucky Educational Television Authority starts today with its broadcast for school hours; and

WHEREAS, there is time available after the school hours for interested groups; and

WHEREAS, the concept of educational television is a proven one by most educational authorities; and

WHEREAS, video-tapes for medicine are available through the University of Florida systems and the University of Pennsylvania; therefore be it

RESOLVED, that the House of Delegates of the Kentucky Medical Association recommend to the Board of Trustees the purchase of time from the Kentucky Educational Television Authority during the next year; and be it further

RESOLVED, that the Kentucky Medical Association Educational Television Committee be authorized the rental of tapes or other material sufficient for two one-hour time periods during the coming year and that the Kentucky Medical Association Educational Television Committee be asked to conduct a survey of physicians following these presentations to determine their value and make an evaluation of this media for medicine.

Recommendations, Reference Committee No. 2

Resolution N for the Educational Television Committee was reviewed and discussed. Reference Committee No. 2 recommends the adoption of this resolution, introduced by William VonderHaar, M.D., Jefferson County Medical Society.

Mr. Speaker, I move the adoption of this section of the report.

(Seconded and carried.)

Mr. Speaker, I move the adoption of the report of Reference Committee No. 2 as a whole.

(Seconded and carried.)

I wish to thank the members of the committee for their patience and perseverance and Mrs. Patsy Waters for her work on this report.

REFERENCE COMMITTEE NO. 2

C. C. Lowry, M.D., Murray, Chairman
Bush A. Hunter, M.D., Lexington
Glenn R. Powell, M.D., Paintsville
Donn L. Smith, M.D., Louisville
Loman C. Trover, M.D., Madisonville

REFERENCE COMMITTEE NO. 3

David B. Stevens, M.D., Lexington, Chairman

Legislative Activities

Reference Committee No. 3 considered the following reports:

31. Report of the Committee on Legislative Activities (State and National Affairs)

35. Report of the Cults Committee—page 1, paragraph 3, first two sentences only

Resolution B—Appreciation of Legislative Activities

Resolution C—Physician Candidates for Kentucky General Assembly

Report of the Committee on Legislative Activities

National Affairs

As has been customary and expected in the past year on Legislative Activities, it has been one of interest and importance and a projection of things to come as are manifested by those people currently holding the office of senator or representative in our national legislature. The key to legislative affairs, of course, is always the people who are elected to these responsible positions.

The KMA Committee on Legislative Activities for National Affairs meets in conjunction and is part of the KMA Committee on Legislative Activities for State Affairs, and meetings were held on the following dates: September 28, 1967, joint meeting with KEMPAC; November 16, 1967; January 4, 1968, in Frankfort; February 6, 1968, in Frankfort; March 5, 1968, in Frankfort; and March 26, 1968, in Washington, D.C.

In addition, the Key Man Orientation Conference was held on January 4, 1968, in Frankfort, Kentucky, with over 50 physicians in attendance.

During the past year, Fred Rainey, M.D., Elizabethtown, Kentucky, attended the AMA Council on Legislative Activities in January, 1968, and I, as Chairman of Legislative Activities for National Affairs, attended one in Chicago in November, 1967. Of the regional conferences scheduled with AMA, one was held May 24, 1968, in Atlanta, Georgia, and was attended by David Hull, M.D., Lexington, Kentucky, representing the KMA Committee on Legislative Activities; James G. Wilhite, M.D., Chairman of the Fayette County Legislative Committee; J. Campbell Cantrill, M.D., KMA Trustee and Secretary of the Scott County Medical Society; and Gilbert L. Armstrong, Director of Field Services of KMA. This meeting featured reports of the legislative climate, medicines, lobbying responsibility, legislator's mock

interview and hearing; case history of the progress of the bill in Congress, and suggested techniques and programs for effective legislative results in the future and potential benefits for the continuing quality health care for people.

During the first session of the 90th Congress, over 1100 bills of medical interest were introduced. Those of major interest are presented below with a very short summary.

P.L. 90-248, Social Security Amendments of 1967, passed Congress the last day of the session and included major changes in both Medicare and Medicaid with Congress following many of the recommendations presented by the American Medical Association. For the information of all the membership, a summary of these major provisions will be submitted at the end of this section of the report as Attachment Number 1.

P.L. 90-31, Mental Health Amendments of 1967, extends program for construction of mental health sites and for staffing.

P.L. 90-40, Selective Service Act of 1967, extends doctor's draft for four years.

P.L. 90-174, Partnership for Health Amendments of 1967, which is really a part of the Comprehensive Health Planning Law enacted by the 89th Congress (P.L. 89-749).

Other bills passed:

P.L. 90-99, Vocational Rehabilitation Amendments of 1967; P.L. 90-103, the Appalachian Regional Development Act of 1967; P.L. 90-146, National Commission on Product Safety; P.L. 90-148, the Air Quality Control Act of 1967; P.L. 90-170, Mental Retardation Amendments of 1967; P.L. 90-189, Flammable Fabrics Act; P.L. 90-222, Economic Opportunity Amendments of 1967.

No major medical or health laws have been enacted by this time with the second session of the 90th Congress. A June, 1968, checklist of important legislative proposals and issues is shown as Attachment Number 2.

The Committee on Legislative Activities for National Affairs is grateful to the House of Delegates and to the Board of Trustees of the Kentucky Medical Association for all their help, their guidance and assistance, and also the opportunity to serve in this capacity during the past year. We feel that it has been a constructive year, and to this we are indebted to many legislators who have helped us in the continuing policy of the enhancement and the further pursuance of quality health care for all of our people, and particularly those of Kentucky. In addition, we feel that the challenge is still upon us, not only to keep poor health programs from being passed, but also to give thought and long-range planning to insure every possibility of the development for those things which are helpful. It must be remembered that we are no longer living in the day of transfusion and tranquilizers, but now of transplantation and, of course, transtellar transportation.

Hoyt D. Gardner, M.D., Chairman,
National Affairs

Attachment Number 1

Changes in Medicare and Medicaid include:

MEDICARE

—Payment of physician fees is authorized either to the patient on the basis of an itemized bill, either unpaid or receipted as paid, or to the physician under the assignment method.

—Payment is authorized for full reasonable charges for radiological or services furnished by physicians to hospital inpatients.

—Hospital outpatient diagnostic services are transferred from the hospital insurance program (Plan A) to the supplementary medical insurance program (Plan B). The change was designed to simplify the procedure for payment of benefits for hospital outpatients.

—The requirement of physician certification of the medical necessity for admission to general hospitals and for hospital outpatient services was eliminated.

—Medicare beneficiaries are given a lifetime reserve of 60 additional days of hospital care after the 90 days covered in a spell of illness. The beneficiary must pay the first $20 per day for the additional hospitalization.

—The Secretary of HEW was directed to study and report to Congress by January 1, 1969, the effects of covering drugs under Medicare and of establishing quality and cost standards for drugs provided under Social Security health programs.

—Services of podiatrists are authorized under Medicare to the extent that a state's law permits, but routine foot care is not covered.

—Outpatient services furnished by physical therapists are authorized within certain limitations.

—The Secretary of HEW was directed to study and make recommendations of adding services of chiropractic and optometrists to Plan B.

—Payment is authorized under Plan B for diagnostic x-rays taken in a patient's home or a nursing home.

MEDICAID

—States are limited in setting eligibility income levels for federal matching purposes.

—States are given until January 1, 1970, to buy-in Medicare Plan B insurance for aged Medicaid beneficiaries.

—States are authorized to make direct payments to Medicaid beneficiaries for physicians' and dentists' services if the beneficiary is not receiving cash assistance.

—States are permitted to select either the five basic health services, or seven out of the 14 authorized, for the medically indigent. The basic five must be provided for those receiving welfare cash benefits. The basic five are: Inpatient hospital services, outpatient hospital services, other laboratory and x-ray services, skilled nursing home services, and physicians' services.

—States must license administrators of nursing homes and set minimum nursing home standards if these institutions are to be eligible to participate in the Medicaid program.

—States must establish method and procedures to safeguard against unnecessary utilization of health care services and to assure that payments for such services and drugs do not exceed reasonable charges.

—Under the program for Aid to Families with Dependent Children (AFDC), states now must offer birth control services to appropriate beneficiaries with acceptance on a voluntary basis. Authorizations for federal financial aid for maternal and child health programs are increased. Services of optometrists are added to child health programs.

Attachment Number 2

JUNE, 1968, CHECKLIST OF IMPORTANT LEGISLATIVE PROPOSALS AND ISSUES

(Updated July 29, 1968)

A. *Internal Revenue Service*—has issued regulations to tax publication advertising and exhibit income of charitable, scientific, educational, non-profit organizations like AMA, all state medical associations, Boy and Girl Scout organizations, National Education Association, U.S. Chamber of Commerce, all the service clubs—altogether about 600 groups. Members of Congress have been urged to request the House Ways and Means Committee to call the IRS officials before it to challenge IRS authority to tax these groups for the first time in spite of the fact there has not been any new tax legislation since

1950. On Wednesday, July 24, the Senate Finance Committee adopted an amendment to the House-passed Renegotiation Extension legislation, which in effect declares a moratorium of one year on the effective date of the IRS Regulations pertaining to advertising income of non-profit organizations. This is meant to give the House Ways and Means Committee an additional year to hold hearings on the merits of this matter, and would cancel any tax liability for the calendar year 1968. Before this amendment can become effective, the House, if and after the Senate adopts the amendment, must also agree to the amendment. It appears that the resolution of this matter will be laid over until after the party conventions and when Congress returns in September.

B. *Hill-Burton Law Extension*—is required in 1968 since its authority is expiring in 1969. It is not yet certain whether the House Committee on Interstate and Foreign Commerce or the Senate Committee on Labor and Public Welfare will begin public hearings first. There are plans to materially amend the present law to permit accessibility of funds (both grants and loans) for construction of new facilities and rehabilitation of old hospital facilities, and there is a rumor that experimentation with new types of facilities would be federally funded. Senator Hill introduced a bill late last year calling for grants and loans. He retires at the close of 1968. Just before Congress recessed for the national party conventions, Senator Hill was pushing a three-year simple extension of the Hill-Burton Act, which extension would keep intact, without any material change, the present Hill-Burton program.

C. *Laboratory Animal Legislation*—is again being pushed by several of the pet owner organizations. These groups have succeeded in obtaining sponsorship of legislation by key members of Congress which, if passed, would give the Secretary of HEW, rather than the Secretary of Agriculture, authority to extend federal controls and licensure over the care and experimental use of laboratory animals. It is possible that hearings could be scheduled late in the session by the House Committee on Interstate & Foreign Commerce and the Senate Labor & Public Welfare Committees. Congressman Paul Rogers (D) of Florida, a prominent member of the House committee, has introduced HR 13168. AMA opposes Federal licensure of laboratory facilities. As Congress recessed just prior to the party conventions, Congressman Rogers of Florida was hopeful that public hearings could be held when Congress returns in September.

D. *Cost of Medical Care Legislation*—early in the year, a number of House and Senate committees considered holding hearings on this issue. A subcommittee of the Senate Government Operations Committee, chaired by Senator Ribicoff, however, obtained the jump on the others and opened hearings April 22. In the first week of the hearings, every witness was a critic of our present medical care system and suggested such changes as: national compulsory health insurance (Rockefeller and Javvits); mandatory health insurance, similar to mandatory automobile liability insurance (Victor Fuchs); designation of hospitals as public utilities and the setting of fixed physicians' fees (Walter Reuther); making hospitals the "center" of all health care with physicians on salaries and establishment of prepaid groups (Cherkasky). The chairman has not yet scheduled a "conservative" witness. About July 20, Chairman Ribicoff announced that he was terminating any further hearings for the balance of this year.

E. *House Interstate Committee & Senate Labor & Public Welfare Committee Bills*—S. 3095, Health Manpower Act, as passed by the Senate, provides three-year extensions of the Health Professions Educational Assistance Act; the Nurse Training Act; the Health Facilities Construction Act; the Graduate Public Health Training Act; and a one-year extension of the Allied Health Professions Training Act. The bill has been reported in the House, providing a two-year extension of the programs that the Senate would have extended for three years. Action is expected in the House the week of July 29, and final action will come before adjournment *sine die*. HR 15758, extending the Regional Medical Programs (Heart, Cancer, and Stroke) provides a two-year extension. This bill has been passed by the House. The Senate Labor Committee reported it on July 24, providing a three-year extension. As reported in the Senate, it would also extend the Hill-Burton Hospital Construction for three years. Final action on this legislation will surely occur before adjournment. Action on HR 15757 and S. 2944, establishing a U.S. Compendium of Drugs is dead for the year, as is the Health Personnel Act, which would provide a new federal health personnel system to be known as the Health Service of the U.S.

F. *Social Security Legislation*—according to many Capitol experts, will be neglected in 1968. However, history suggests otherwise—there has always been a Social Security bill enacted in an election year, at least recently—that's politics. In such an event, it is likely that all the old problems will again be with us, such as chiropractic benefits, coverage of all of the disabled and many others under age 65, elimination of co-pay and deductibles, etc., and inclusion of drugs as a Medicare benefit as suggested in Senator Montoya's S. 2936, calling for reimbursement subject to a $25 deductible and 20% co-insurance for drugs approved by a formulary committee. When Congress returns from its recess for the party conventions, it is possible that some politically motivated amendments will be sought by the Administration.

G. *Hart and Nelson Hearings*—meant to keep the heat to the feet of the private sector of medicine, and the drug companies apparently have been abandoned for the balance of 1968, but there is every likelihood that an effort will be made in 1969 to revive and keep alive this matter.

H. *Device Legislation*—AMA opposes the administration bill, HR 10726, but supports HR 6165, introduced by Congressman Reinecke, establishing a national commission to study the problem. It is apparent that nothing will be done in this area for the balance of 1968.

I. *Child Health Bill*—on April 22, Congressman King (D), California, introduced HR 16616, the Child Health Act of 1968, with Senator Long (D), Louisiana, dropping into the Senate hopper a substantially identical bill S. 3323. The proposal contains three major provisions. The first calls for supplemental maternal and child welfare programs under the Maternal and Child Health Care Act to feature comprehensive maternity prenatal and postnatal care for mothers from low income families, comprehensive health care for children during their first year of life, and family planning services. The second establishes a program for determining federal payments for drugs under Medicare, Medicaid, and Maternal and Child Health Care Act programs. The third major provision gives the Secretary of HEW authority to put into effect any method of payment for health services which is developed in the "incentive reimbursement experiment" program about to be undertaken by HEW. If adopted, the provision would give the Secretary the authority, without further Congressional approval, of determining the method by which providers of care would be compensated for care which they rendered under federal-

ly assisted programs. Because of that feature of the President's proposal on child health pertaining to federal regulation and restricted payments for drugs, there is some reason for concern that Senator Long will attempt, in the closing moments of the Congress, to add to some pending bill this entire proposal. It is well known that Senator Long is attempting to get some program rolling in the area of generic drugs.

Composition of Current Congress—Senate: 36 Republicans, 64 Democrats (was 33 Republicans, 67 Democrats); House: 187 Republicans, 247 Democrats, 1 vacancy (was 140 Republicans, 295 Democrats).

State Affairs

The Committee on Legislative Activities had a rather busy year on state affairs, this being the year for the Kentucky General Assembly to meet. The amount of time and efforts expended by the Committee on Legislative Activities is in no way reflected by the six meetings which this committee has held.

In addition to the committee meetings, the Chairman for State Affairs attended the Congressional Dinner in Washington, the AMPAC Workshop in Washington, and an AMA Council meeting on Legislative Activities in Chicago. The Chairman also attended several KMA trustee district meetings appearing on the program to discuss legislative affairs. Among those trustee district meetings attended were Paducah, Owensboro, Hopkinsville, Paris, Pikeville, Louisville, Elizabethtown, and Lexington. In addition to this, the Committee on Legislative Activities was represented at two other trustee district meetings by David Hull, M.D., a member of the committee. We were, therefore, represented at 10 of the 12 district meetings held this year.

Prior to the beginning of the Kentucky General Assembly, the Chairman of this committee held three meetings with representatives from the Kentucky Society of Pathologists, the Kentucky State Society of Medical Technologists, the Kentucky State Society of American Medical Technologists, the Kentucky Hospital Association, and the State Department of Health in an effort to draft a clinical laboratory bill which would be mutually acceptable to all groups concerned. These meetings were held in Louisville and Frankfort. With the advice and assistance of those people involved, a clinical laboratory bill was introduced in the waning days of the General Assembly and was passed. All groups concerned were most cooperative.

The chairman held two sessions with representatives from the University of Louisville School of Medicine, the University of Kentucky College of Medicine, the Kentucky State Department of Health, the Kentucky Society of Pathologists, and the Kentucky State Coroners Association in an effort to draft a medical examiner bill which was mutually acceptable to all groups concerned. The Kentucky Funeral Directors Association was invited to send representatives, but declined to do so. A mutually acceptable bill was drafted, was introduced, and passed during the 1968 General Assembly as a result of these meetings.

During the course of the General Assembly, the Chairman went to Frankfort from one of four times per week visiting state officials, legislators, and other interested parties. A few trips out in the state were also made pertaining to legislative affairs. In addition, there were two meetings of the Kentucky Medical Association Woman's Auxiliary held in Frankfort during the General Assembly with the chairman speaking at one luncheon while committee member David Hull, M.D. and Cults Committee Chairman David Stevens, M.D. spoke at the second luncheon. The interest, enthusiasm, and dedication of the Auxiliary was most appreciated, and their efforts in Frankfort were very helpful and most beneficial.

During the General Assembly, the Chairman for State Affairs testified before the House Labor and Industry Committee and also before the House Health and Welfare Committee on legislation in which we were vitally interested. Other physicians were recruited to appear before the various House and Senate committees to testify on legislation in which we had the same keen interest, and their testimony was well received and most helpful.

The Orientation for the State-wide Key Man System was conducted in Frankfort on January 4, 1968, with our guest speaker being Governor Louie Nunn. There were approximately 50 physicians in attendance, the attendance being hampered by severe weather conditions at the time. The Key Man System in some areas has worked rather well, but in other areas has worked rather poorly. A number of physicians who are members of the Key Man System do not seem to understand their importance and the fact that it is absolutely essential for them to respond *each* time they are called upon to act. Many times we receive reports that various men in the Key Man System reply, "I was called on this same bill last week," and they do not seem interested in responding a second, third, or fourth time. It is *imperative* that all members of the Key Man System realize that this system is vitally important, and their response is directly related to our legislative success while the General Assembly is in session. Each man should understand that he will probably be contacted several times on the same bill as the situation changes in Frankfort. It is just as important for him to respond to the second or third call as it is for him to respond to the first call.

An extensive effort was made this past year to improve communications, and although there were many rough spots in this area during the General Assembly, I feel that the communications were greatly improved. While the legislature was in session, the KMA Board of Trustees authorized a "Quick Action Committee," composed of the President, the President-Elect, and the Chairman of the Board, to which our committee could refer legislative matters and receive a quick endorsement or rejection from KMA. This Quick Action Committee was used innumerable times, and I feel that it is extremely important that such a system be continued. This made it possible for us to obtain official policy on any piece of legislation within a matter of hours, and it enabled us to present an organized and efficient response in Frankfort, which, I feel, gave the medical profession the appearance and acceptance desired.

An effort was made to establish a line of communication with the State Health Department, the University of Louisville School of Medicine, the University of Kentucky College of Medicine, the Kentucky Hospital Association, the Kentucky Dental Association, and the Kentucky Pharmaceutical Association, and other allied groups, in an effort to keep each other informed of legislation in which the various organizations were interested and also exchange opinions as to the advantages or disadvantages of proposed legislation. This channel of communication is extremely beneficial to the Kentucky Medical Association, and certainly I feel it is beneficial to all allied groups concerned. I would heartily encourage continuation of this system.

The KMA House of Delegates, at its last meeting, went on record endorsing various legislative proposals, but, almost in every instance, left the decision up to the Committee on Legislative Activities as to the content of such proposed legislation and *as to the time such legislation would be introduced and which bill would take priority*. This is almost essential, and I would *strongly* recommend that these decisions on all legislative proposals endorsed by the 1968 session of the House of Delegates be left again to the Committee on Legislative Activities. This is an *extremely* important consideration, and I shall be most happy to appear before any group concerned to offer any additional information desired if questions exist.

In reference to the full-time staff man for legislative affairs, several individuals have been interviewed, but to date one has not been secured. It is the feeling of the chairman that, although the 1967 House of Delegates passed a five dollar dues increase, this will *not* provide adequate funds to employ a full-time professional man for legislative affairs. I felt last year and still continue to feel that a full-time staff man for legislative affairs is wise and desirous, but I also feel that to properly salary such an individual and properly staff his office, that 10 dollars per member would be required. It also has become apparent that it is extremely important to have two men available during the time the legislature is in session. It is physically *impossible* for one man to know what is going on in the Senate Chamber and the House Chamber at the same time. In addition to this, the work load is so much heavier during the legislature that it is almost impossible for one man to carry the load. I feel that it would be *extremely* beneficial to the Kentucky Medical Association to make it clear to everyone concerned that our field man is responsible *only* to his superiors and *not* to individual physicians located out in the state. This is not to say that he would not cooperate fully as best he could with any physician; however, (although their intentions were probably good) there have been times this past year when physicians who were not in any official capacity with KMA have ordered the field man to assume a rather large administrative task, and at times the directions may have actually conflicted with KMA policy.

Emphasis was placed this last year on cooperation of all specialty groups and individual physicians pertaining to legislative matters. It is *extremely* important that specialty groups and/or individual physicians who are interested in particular legislation channel their activities through the KMA Committee on Legislative Activities. This permits all parties concerned to be fully informed; it permits research and review of the proposed bill, and it enables *all* interested parties to present a united effort which certainly enhances the chances for passage. Without such cooperation, there will be confusion and chaos. We had tremendous cooperation from almost everyone with only one exception existing as a sore spot. This apparently was due to lack of communications directly with the officials of this particular specialty group, and efforts are currently underway to remedy our communicative system so that a greater understanding will exist during the next session of the legislature.

The Fayette County Medical Society agreed to staff and operate a first-aid station during the Kentucky Legislature, and this was approved by our committee and the Board of Trustees. However, satisfactory space in the Capitol was not obtainable, and consequently the first-aid station did not come into existence.

Considerable effort was made during this session of the General Assembly to present a positive approach on legislative matters of medical implication. On numerous occasions we have heard from legislators that the medical profession is constantly opposing legislation and rarely, if ever, supporting legislation. This, of course, has not been the case in the past, and considerable effort was expended this year to reveal to the legislators that the Kentucky Medical Association has supported many pieces of legislation. Letters were distributed to each state senator and representative listing the various bills which KMA had endorsed and was supporting. This seemed to have a most favorable effect on the legislators.

We continue to hear the comment from legislators that physicians are not active enough in primary and general elections. We wish to urge *all* physicians to become interested in legislative matters, stay abreast of legislative trends and effectively communicate their feelings and opinions to their legislators. We also feel that *each* physician should support the candidate of his choice, both financially and by active campaigning. It is extremely important that a day-to-day, year-around, friendly contact be maintained and not just during the legislative sessions or during an election year.

During the 1968 General Assembly, there were 738 bills and resolutions introduced in the House, plus 499 bills and resolutions introduced in the Senate for a total of 1,237. Approximately 10 percent of these had medical implications either directly or indirectly, and all of these bills were considered by the Committee on Legislative Activities with a position being taken by our committee on most of them. A new system was instituted this year whereby the bills were referred to our legal counsel by our field representative. The bills were then reviewed by our legal counsel and referred to the chairman for additional review and comment, and then the Committee on Legislative Activities or the Quick Action Committee took a position on all of the bills giving the Kentucky Medical Association an official stand on the proposed legislation. Although this procedure was at times cumbersome, and on occasions the time factor became a problem, this procedure was extremely beneficial and helpful to the chairman. I feel that the advantages of the system far outweigh the disadvantages.

The following are only a few of the bills which KMA endorsed: Senate Bill 291, Medical Examiner Bill; Senate Bill 412, Clinical Laboratory Bill; House Bill 347, Dangerous Drug Act; House Bill 147, KMA's Educational Bill; House Bill 408, Blood as a Service; House Bill 420, Measles and Smallpox Vaccination; House Bill 26, Narcotic Act; House Bill 148, the Control of Methyl Alcohol; House Bill 184, Implied Consent; House Bill 260, Motorcycle Safety; House Bill 73, Mental Health; House Bill 171, Interstate Compact on Mental Health; and House Resolution 86, Study of the State Board of Health composition and responsibility.

All of the above listed bills, which were endorsed by KMA, passed. House Resolution 86 was a resolution providing for the study of the composition of the State Board of Health and its responsibilities. The Kentucky Medical Association supported such a study in an effort to thwart the passage of a number of bills which would have altered the makeup of the State Board of Health drastically without due consideration being given to the consequences. This resolution is extremely important to the medical profession, and the review and future recommendations pertaining to the composition of the State Board of Health should certainly be observed closely.

Following are a few of the bills which KMA opposed: Senate Bills and House Bills broadening optometric services and placing an optometrist on the Advisory Committee for Medical Assistance; Senate Bill 341, requiring a physician to be on duty around the clock in hospitals of 100 beds or more; House Bill 48, requiring payment to chiropractors for workmen's compensation cases; House Bill 206, lowering the licensing requirements for physical therapists; House Bill 495, a bill allowing the treatment in TB Hospitals of chronic pulmonary diseases *other* than tuberculosis; House Bill 597, a bill altering the requirements for licensing of R.N.'s and L.P.N.'s.

Of the above-mentioned bills opposed by KMA, House Bill 48, the chiropractic bill, probably received the most attention. (It is interesting to note that this bill was debated on the floor of the House longer than was the tax bill). All-out efforts were made on the part of the chiropractors on this particular piece of legislation. We were required to spend considerable time and effort on behalf of good health legislation to combat this proposal. The first crucial vote came when a motion was made to table House Bill 48 and was passed only after the Speaker of the House, Julian Carroll from Paducah, voted to break a tie vote, and the motion was tabled. Two days later the bill was defeated with a vote of 50 to 35.

Although House Bill 495, which would have opened the doors of the TB hospitals in Kentucky for the treatment of chronic respiratory diseases other than tuberculosis was defeated, the issue is yet to be resolved. We propose the appointment of a committee to be composed of members from the Kentucky Medical Association, the TB Commission, the University of Louisville, the University of Kentucky, and the Kentucky General Assembly, or other branches of the Government, to study the needs of the TB hospital change and to make recommendations for any changes which are obviously desired. This matter should be followed very closely in future months.

In conclusion, it is the feeling of the chairman that we had a successful year, but I cannot emphasize too much the tremendous need for greater interest and response at the local level throughout the state on legislative matters. There is a great need for more physicians to seek public office, and it is my feeling that it would be beneficial both to the profession and to the Commonwealth of Kentucky to have two or three physicians in the House and a couple of physicians in the Senate. I sincerely hope that the Board of Trustees will encourage any prospective candidate for a House or Senate seat from our profession to seek such office. It is also my hope that the physicians throughout the state of Kentucky will become more interested in legislative affairs, and that their response at the local level will be even greater in the future when called upon for help pertaining to legislation which we either support or oppose.

I wish to express appreciation to State Representative Mitchell Denham, M.D., who was *most* cooperative and *extremely helpful* during the General Assembly; to the Quick Action Committee, which was extremely cooperative and very beneficial; to the Board of Trustees; and to each member of the Committee on Legislative Activities. I am also indeed grateful to our staff, Bob Cox and Gil Armstrong, for their cooperation and tremendous effort. Very few people realize the dedication and unyielding efforts of these two staff men. I could never ask for a more cooperative field man than Mr. Armstrong, and he is highly respected in Frankfort.

Fred C. Rainey, M.D., Chairman
State Affairs

Recommendations, Reference Committee No. 3

Reference Committee No. 3 met in open session with eight (8) members present at the hearing in addition to the five (5) committee members. The report of the Committee on Legislative Activities as related to National Affairs as presented by Chairman, Hoyt D. Gardner, M.D., was reviewed. The reference committee commends the members of this committee for their excellent work.

Mr. Speaker, I move the adoption of this section of the report. (Seconded and carried.)

The report of State Affairs presented by Fred C. Rainey, M.D., was reviewed, and most of our open hearing related to discussion of the items in this report. The reference committee considered this to be an excellent report.

Mr. Speaker, I move the adoption of this section of the report. (Motion seconded; carried.)

In addition to the items in the previous report, the committee has several specific recommendations:

1) The Board of Trustees be instructed to provide such administrative staff that two staff men be assigned full-time as lobbyists in Frankfort during the sessions of the General Assembly.

Mr. Speaker, I move the adoption of this section of the report. (Seconded and carried.)

2) After considering the legislative problems related to House Bill 495, which related to the Kentucky Tuberculosis Commission, the Reference Committee recommends that the Board of Trustees be instructed to seek appointment by an appropriate agency, such as the Legislative Research Commission, of a committee composed of members of the Kentucky Medical Association, the Tuberculosis Commission, the University of Louisville, the University of Kentucky, the Kentucky General Assembly or other branches of government. This committee would study the needs of the Tuberculosis Commission and make recommendations for any changes indicated.

Mr. Speaker, I move the adoption of this section of the report. (Seconded.)

A motion was made, seconded and passed that the words "the State Health Department" be inserted after the words "Kentucky Medical Association" in the above recommendation of the Reference Committee No. 3.

(The original motion as amended carried.)

3) The Reference Committee considered the matter of a first aid booth to be located in the state capitol during the sessions of the General Assembly. This is an excellent idea and should be implemented, if possible, at the next session of the General Assembly.

Mr. Speaker, I move the adoption of this section of the report. (Seconded and carried.)

(The following sentences were split from the Report of the Committee on Cults, the main portion of the report being referred to Reference Committee No. 4).

The Committee recommends that legislation be drafted at this time relating to licensure of various health disciplines by one agency under the direction of the Board of Health. The Committee also recommends that consideration be given to legislation which would limit the use of human x-ray to that actually performed by or supervised by physicians, dentists and osteopaths.

BOARD ACTION: The Board approved this report, noting that these recommendations had been acted upon by the KMA Executive Committee at its meeting on July 25, 1968.

Recommendations, Reference Committee No. 3

The Reference Committee notes that the Board has already acted upon these proposals of the Cult Committee, and therefore no action by this House is necessary.

Mr. Speaker, I move the report of the Cults Committee be filed for information.

(Motion seconded and carried.)

Resolution B

KMA Board of Trustees

WHEREAS, the 1968 Session of the Kentucky General Assembly was concluded on Friday, March 15; and

WHEREAS, the Constitution of KMA has mandated its members to support the enactment and enforcement of just medical laws; and

WHEREAS, in order to fulfill this responsibility in the 1968 Kentucky General Assembly it was necessary to carefully screen the 621 bills and 117 resolutions in the House and 417 bills and 82 resolutions in the Senate, and analyze those proposals that related in any way to the public health—a very considerable task in itself; and

WHEREAS, it was necessary to employ all available resources in the Association to resist a number of bills that were deemed not to be in the public interest, and to assist in passage of bills that were believed to be in the public interest, and to secure physicians to testify before committees to speak in favor of or in opposition to proposed legislation, and

WHEREAS, only after determined and sustained effort was it possible to conclude the 1968 session in a manner that was regarded highly satisfactory,

NOW THEREFORE BE IT RESOLVED THAT, this Board of Trustees on behalf of all members

of the Association, express its full and sincere appreciation for all the excellence of our leadership in this area, the broad continuing energies in this undertaking, and for the splendid results achieved, to our President, the Committee on Legislative Activities, to the legislative key men, and all KMA members and staff who worked so diligently. We especially express our gratitude to State Representative Mitchel Denham, M.D., and Fred C. Rainey, M.D., Chairman for State Affairs of the Legislative Committee, who devoted so many hours and worked so earnestly and unselfishly on behalf of good health legislation.

Recommendations, Reference Committee No. 3

Recognizing that successful legislative activities require broad participation by many members and staff of the Association, the Reference Committee is in complete agreement with Resolution B, Appreciation of Legislative Activities, introduced by the Board of Trustees.

Mr. Speaker, I move the adoption of Resolution B. (Seconded; carried.)

Resolution C

KMA Committee on Cults

WHEREAS, the practice of medicine is becoming increasingly affected by government programs, and

WHEREAS, the health needs (both real and imaginary) of the public have apparently found a permanent home in the political arena, and

WHEREAS, the A.M.A. has shown quackery to be a billion dollar business, and

WHEREAS, certain non-medical "healing arts" seek constantly to broaden the scope of their licensed activities without a commensurate or any increase in their education or training, and

WHEREAS, Mitchel B. Denham, M.D., has served with distinction as a member of the Kentucky House of Representatives since 1960 and has been of tremendous value not only as a spokesman for the medical profession but as a source of information to his colleagues on medical or health-related legislation,

NOW, THEREFORE, BE IT RESOLVED BY THE HOUSE OF DELEGATES OF THE KENTUCKY MEDICAL ASSOCIATION that Mitchel B. Denham, M.D., be commended for his unselfish and sacrificial service to the people of Kentucky and that other physicians whose practice is such as will permit it, be urged to offer themselves as candidates for the General Assembly, and

BE IT FURTHER RESOLVED that each and every member of this Association make a diligent effort to find physicians who can and will become candidates for the General Assembly and offer such potential candidates their active and meaningful support.

Recommendations, Reference Committee No. 3

There was total agreement in the hearing and in executive session for support of Resolution C, Physician Candidates for Kentucky General Assembly (introduced by the Committee on Cults) urging physicians to seek public office.

Mr. Speaker, I move the adoption of Resolution C. (Motion seconded and carried.)

Mr. Speaker, I move the adoption of the report of Reference Committee No. 3 as a whole as amended.

(Seconded; carried.)

Mr. Speaker, I would like to thank you for appointing such fine gentlemen to this Reference Committee. I would also like to thank these distinguished physicians for their contributions to this committee. Without the expert help of Miss Victoria Ashcraft, the job could not have been done. Our thanks to her.

REFERENCE COMMITTEE NO. 3
David B. Stevens, M.D., Lexington, Chairman
W. Donald Janney, M.D., Covington
Stephen Kelley, M.D., Somerset
W. Faxon Payne, M.D., Hopkinsville
Charles C. Smith, M.D., Louisville

REFERENCE COMMITTEE NO. 4

Kenneth M. Eblen, M.D.,
Henderson, Chairman

Reports of Public Service and Medical Services

Reference Committee No. 4 considered the following reports:

13. Report of the Kentucky Physicians Mutual, Inc., Board of Directors
22. Report of the Advisory Committee to Blue Shield
23. Report of the Advisory Committee to Blue Cross
24. Report of the Committee on Occupational Health, Physical Medicine and Rehabilitation
25. Report of the Maternal Mortality Study Committee
32. Report of the Committee on Communication and Health Education
33. Report of the Committee on Health Careers
34. Report of the Committee on Community and Rural Health
35. Report of the Cults Committee
36. Report of the Senior Day Committee
37. Report of the Committee on School Health, Physical Education and Medical Aspects of Sports
38. Report of the Advisory Committee to Woman's Auxiliary
44. Report of the Ad Hoc Study Committee for Improved Community Health

Resolution D—Credit Arrangers (Fayette County)
Resolution F—Insurance Forms (Fayette County)
Resolution I—Home Health Care (Henderson County)
Resolution K—Annual Registration of License for Physicians (Jefferson County)
Resolution M—Physicians on Hospital Boards of Trustees (McCracken County)

Report of the Board of Directors, Kentucky Physicians Mutual, Inc.

It is a privilege, as Chairman of the Board of Directors of Kentucky Physicians Mutual, to bring this annual report on Blue Shield to you . . . the House of Delegates of the Kentucky Medical Association. This is our 19th year of service to the people and doctors of Kentucky. We will pay, this year, over $11,500,000 to doctors for services to our members. Our Blue Shield Plan is financially sound and continues to grow, as indicated by the following figures.

We had, as of June 30, 1968, 973,062 members, which is a net gain of 4.11% in the preceding twelve months. In addition, over 188,950 people enrolled in Extended Benefits or Major Medical, which is a net gain of 63%. During the past twelve months, 899 additional companies enrolled their employees in Blue Shield, making in excess of 9,799 companies and organizations in Kentucky voluntarily offering this vital protection to their employees and dependents; 2,405 of these companies provide Extended Benefits or Major Medical to their members. Our staff is constantly trying to get members and groups to increase their protection, which is a voluntary decision that can only be made by the member or employer who makes regular payment for protection.

The past year has been a very challenging one for Blue Shield. As Chairman of the Board, I am proud of the Board members, physicians and businessmen who serve with determination and purpose for the people of Kentucky and the profession. The demands on Blue Shield are ever-increasing. This past year we have made great strides in meeting the challenges of voluntary prepayment and the free enterprise system.

This year we lost two distinguished Board members.

(1) Thomas O. Meredith, M.D.—a founder of Kentucky Physicians Mutual and a former president of the Board.
(2) Joe Sanford—friend to all of us as physicians and a capable and willing member of the Board, and Secretary of Kentucky Physicians Mutual.

To fill the voids in Medicare, 49,831 members over 65 years of age are now enrolled in our over-65 program. We are pleased that during the year we were able to increase their protection and reduce the cost for this program. One important benefit we added was nursing home care. The increased benefits will help meet the additional needs of members of this age group and further fill the voids in their protection. You will recall, last year, I reported a reduction in the deductible from $100 to $50. . . This program is jointly underwritten by Blue Cross and Blue Shield and is helping our senior Kentuckians voluntarily meet more of their health care needs.

The Extended Benefits contract was also improved with no increase in current dues. We were able to add coverage in areas such as physicians benefits and nursing home care. The maximum liability per member was changed from $10,000 to $20,000. Nursing home benefits were also added to our Major Medical programs. At the same time, we decided to permit the Extended Benefits Endorsement to be continued on a direct basis by members leaving groups and to be purchased by non-group members; a needed benefit to help protect Kentucky families from the cost of long-term or catastrophic illness and accident. Kentucky Physicians Mutual also approved offering Usual and Customary programs provided adequate peer review committees can be established.

The P.S.I. surgical-medical schedules C and D rates were reduced for all non-group, Farm Bureau and employee groups under 50 subscribers. Groups over 50 are rated annually, and these rates are determined on experience and usage factors. These rate reductions produced many positive public relations reactions.

Kentucky Physicians Mutual is sound financially and has reserves $9.39 per member, which is adequate. The Plan continues to operate with one of the lowest overhead costs among the 74 Blue Shield Plans in America. In Plans of comparable size, from 500,000 to 1,000,000 members, out of the 17 in America, Kentucky is among the low 4 in overhead costs. We are pleased also that an officer of our Kentucky Plan now serves as a delegate at large on the Board of Directors of the National Association of Blue Shield Plans.

Blue Shield in Kentucky operates in a branch office, branch plant climate, where the decisions made in other states for large national companies affect us in Kentucky. More and more companies are demanding uniform benefits for their employees and dependents all over America. The voluntary system is being faced every day with additional demands for full payment of benefits. Unless these demands are met, the companies as well as the unions will turn more and more to government.

The voluntary prepayment system is healthy and growing, in spite of the threats from every side. Working together with the medical profession, industry, and other segments of our community, with a sincere desire to do what is beneficial to all concerned, we will continue to help strengthen the voluntary system, the private practice of medicine, and to help more and more people budget in advance so that they may be in a better position to provide adequate health care for themselves and their families, and at the same time maintain the free choice of their doctor and hospital and be in a better position to meet their responsibility to their doctor and hospital.

We wish to extend to the members of the medical profession and to the staff of the Kentucky Medical Association our sincere thanks for their cooperation and contribution in helping make this another successful year.

Robert W. Robertson, M.D., Chairman

Recommendations, Reference Committee No. 4

The committee read the Report of the Kentucky Physicians Mutual, Inc., Board of Directors and wishes to commend all the members of the committee. As noted in the last two lines, your committee feels that not only adequate peer review committees be established by Kentucky Physicians Mutual but also to work with all third party carriers.

Mr. Speaker, I move the adoption of this section of the report.

(Seconded.)

At this juncture, the Speaker recognized Board Chairman, Walter L. Cawood, M.D., who stated that the Board of Trustees, at its September 25 meeting, voted to recommend to the House that the Reference Committee No. 4 Report be amended to provide for the establishment of a "Usual and Customary Review Committee" rather than a peer review committee. During the ensuing discussion, the following motion to amend this report was made, seconded and carried that the second sentence in Reference Committee No. 4 report be changed to read: "As noted in the last two lines, your committee feels that a usual and customary review committee should be established by KMA for all third party carriers."

The original motion as amended carried.

Report of the Advisory Committee to Blue Shield

The members of the KMA Advisory Committee to Blue Shield felt that we had one of our most important meetings in recent years when we met on May 2 of this year.

In our discussions, it was emphasized that the financing of health care for the people of this country is a problem of the utmost importance.

The concept that every citizen should have access to adequate health care has long been supported by the American Medical Association and by the Kentucky Medical Association.

Through Medicare and Medicaid, federal and state governments now use tax money to pay for the health care of the aged and the economically disadvantaged. Strong pressure is being brought to bear on our legislative bodies to extend these programs to cover all the rest of our population.

The Advisory Committee to Blue Shield feels strongly that if our present system of medical practice is to survive, health care for those not yet covered by governmental programs must be financed through voluntary prepayment mechanisms to an increasing degree. Blue Shield has long been in the forefront in providing such coverage.

We were pleased to have representatives of the Blue Shield staff attend our session and report on changes being made in some of the Blue Shield contracts. With no additional premium, these changes reflect numerous increases in benefits in the Extend-

ed Benefits Endorsement, the Blue Cross-Blue Shield 65 certificates, Schedule D, Preferred and Schedule C contracts. In addition to these increased benefits, dues for the Blue Cross-Blue Shield 65 certificates and Schedules C and D are being reduced.

The Extended Benefits Endorsement will have additional benefits in the areas of surgery, anesthesia, in-hospital medical care, home and office calls, nursing home care, consultations and the maximum amount of benefits is being increased from $10,000 to $20,000. The Blue Cross-Blue Shield 65 certificate will have increased benefits in hospital in-patient care, extended care facilities, private duty nursing, hospital charges for out-patient services and the maximum life-time benefit is being doubled from $5,000 to $10,000.

In unanimously accepting this report, the members of the Advisory Committee complimented the Blue Shield staff on their management and program planning. We call to the attention of the House of Delegates that in today's rising cost of medical care, particular note should be made of our Blue Shield Plan whereby dues were lower for subscribers while their benefits were considerably increased.

The demand for paid in full coverage for physicians' services has been growing rapidly in the last few years. This demand has been accelerated by the advent of Medicare and Medicaid, and by the adoption by large national employers of the principle of payment of usual and customary fees. This principle of payment is also generally enthusiastically endorsed by the medical profession not only in Kentucky but all over the nation.

Blue Shield in Kentucky has previously offered certain contracts under which payment would be made for usual and customary fees. A method has now been developed of rating group accounts of any size located in any area of Kentucky which could now be offered for payment of usual and customary fees.

Your Advisory Committee to Blue Shield feels that it is an important and progressive step for the KMA House of Delegates to re-affirm its policy of reimbursement on the usual and customary basis and to implement this concept by urging Kentucky Physicians Mutual, Inc. (Blue Shield) to provide contracts to as many of its subscribers as possible on the usual and customary principle.

Your Advisory Committee to Blue Shield unanimously recommends the adoption of the following resolution:

WHEREAS, the American Medical Association has re-affirmed its support of the Usual and Customary concept and has recommended that this concept be extended to all third parties, and

WHEREAS, the House of Delegates of the Kentucky Medical Association reaffirmed its support of the principle of payment of professional fees on a Usual and Customary basis, and

WHEREAS, the Kentucky Medical Association and Kentucky Physicians Mutual jointly conducted a survey to establish Usual and Customary fee ranges, and

WHEREAS, this survey was completed through the cooperative efforts of Kentucky Physicians Mutual and the Kentucky Medical Association to provide guidelines for implementing and administering the Usual and Customary Program in Kentucky

BE IT THEREFORE RESOLVED THAT the KMA Advisory Committee to Blue Shield recommends to the KMA Board of Trustees that this resolution be adopted reaffirming support of the Usual and Customary principle and pledging the assistance and cooperation of the KMA through the following:

1. That a KMA Usual and Customary Advisory Committee be formed representing all major specialty groups including General Practice to act in an advisory capacity to Blue Shield providing assistance in the administration of the program. This committee would also serve as a central review committee to review cases from county societies too small to develop their own local committee or to review cases which would be referred by Blue Shield or a county society or physician in the event such a request should occur.
2. THAT KMA write a letter and institute an information program to all county medical societies defining the concepts of Usual and Customary, explaining the mechanics of its administration and urging local cooperation and support.
3. That KMA assist and encourage all county medical societies with twenty or more active practicing physician members in establishing a local review committee, and that counties having between ten and twenty physicians will be invited to establish their own review committee, to review cases where the charges exceed the maximum beyond which payment cannot be routinely made. These committees, along with the KMA Advisory Committee, would assist in developing guidelines for the processing of cases of an unusual nature.

Since the implementation of the above resolution cannot be accomplished without considerable planning and to minimize as much loss of time as possible, the Advisory Committee encourages Blue Shield to offer this contract to accounts that are demanding it and to work with the county medical societies involved in establishing a peer review committee prior to final action being taken on the resolution by the House of Delegates in September. We urge the KMA Executive Committee and Board of Trustees to act similarly in their review of this resolution.

As mentioned earlier in this report, your committee members feel this matter to be of prime importance to the medical profession of Kentucky.

A full and detailed discussion was accomplished during our meeting. Our members are unanimous in the recommendations made and approval by the Board of Trustees and House of Delegates is respectfully requested.

This committee in its role of maintaining a friendly and close liaison with Blue Shield hopes to continue to reflect the policies of this Association and to provide assistance in the up-grading of Blue Shield coverage for our citizenry.

W. Vinson Pierce, M.D., Chairman

This report was reviewed by the Board of Trustees on August 15, 1968.

BOARD ACTION: The Board recommends that paragraph one of the resolution which appears on page three of the report be amended by adding to the first sentence thereof the following: "and insuring that the levels of 'usual and customary fees' are continuously revised in the light of information currently received by Blue Shield from participating physicians".

Recommendations, Reference Committee No. 4

Your committee after much deliberation and debate from interested parties recommends the adoption of the Report of the Advisory Committee to Blue Shield and the implementation of the resolution reaffirming the Usual and Customary fee principle.

Mr. Speaker, I move the adoption of this section of the report.

(Seconded and carried.)

Your committee feels that the county and state review committees to be formulated by this report, the Resolve No. 3 on page 3, be designated as Claims Review Committees to handle all third party claims.

Mr. Speaker, I move the adoption of this section of the report.

(Seconded and carried.)

Report of the Advisory Committee to Blue Cross

The Medical Advisory Committee to Blue Cross consists of seventeen appointed doctors from various parts of the state. Representative members of this committee met at the Headquarters Office of Blue Cross-Blue Shield in Louisville to review questionable or controversial claims submitted by physicians that dealt with the need and/or duration of hospital care.

During the twelve months beginning June 1967 through May 31, 1968, the committee reviewed 25 cases in three meetings, amounting to 1,059 hospital days. Of this amount, 384 days were disallowed; representing a savings of over $13,000. It is interesting to note that during the same period, 38 cases were considered by the Local Review Committee, amounting to a total of 1,916 hospital days, of which 80 were disallowed, for a savings of approximately $2,800.

The committee serves a dual purpose in monitoring the Blue Cross Plan, by first furnishing the public and the medical profession with the most advantageous coverage possible for the premiums paid; and secondly, by avoiding abuses to Blue Cross by studying and correcting trends before they develop into abuses, while continuing the effort to keep physicians of the state informed and interested in the operation of Blue Cross.

The members of this committee are to be congratulated for their diligence, dedication to duty and faithfulness. While they reflect KMA's and Blue Cross' efforts to screen claims in order to effectively limit unnecessary or prolonged hospitalization, their work also produces educational features for the other Kentucky physicians.

The entire committee usually meets once a year in conjunction with the representatives from Blue Cross to discuss the work of the committee and to make constructive recommendations to Blue Cross.

George W. Pedigo, M.D., Chairman

Recommendations, Reference Committee No. 4

Your committee reviewed the report of the Advisory Committee to Blue Cross as submitted by the chairman and wishes to commend long hours of work by the chairman and his committee but after much discussion from the floor, your committee would like to add one paragraph as follows: "that Blue Cross and other third party agencies when asking for additional information from a patient's hospital chart that this be done with the physician's prior approval."

Mr. Speaker, I move the adoption of this section of the report.

(Motion was seconded and after brief discussion carried.)

Report of the Committee on Occupational Health, Physical Medicine and Rehabilitation

Our committee this year is a combination of two previous KMA committees and it was generally agreed that we should have responsibility in the field of environmental health, as it relates to air pollution and water pollution; responsibility in the field of health care of the wage earner; and loss prevention in cases of toxic materials, trauma occurring on the job, etc.

The KMA Industrial Medicine Committee, in its 1966 Report to the House of Delegates, noted its desire to see the Kentucky Department of Health provide an employees health service for state employees. The purpose of a health service program is to act as a preventative program if illness should occur on the job, to treat it on the spot, and then send the patient to his own family physician, and that this program should in no way encourage competition among physicians. Your committee this year also endorses such a program.

We reviewed the 1966 Report of the Physical Medicine and Rehabilitation Committee of KMA and feel that definite steps should be taken regarding implementation of a revision of the legislation pertaining to Workmen's Compensation Laws. We understand such a recommendation has been made to the Governor by KMA officials.

Tetanus prophylaxis was another matter of interest to our committee this year and in urging an educational campaign on tetanus prophylaxis, correspondence was initiated with the State Department of Health and one of our committee members authored an editorial which appeared with a chart in the March issue of the Journal of KMA.

John E. Eckerle, M.D., Chairman

This report was reviewed by the Board of Trustees on August 15, 1968.

BOARD ACTION: This report was approved with the following exception: The Board recommends that the proposed employees health service for state employees not be implemented without the approval of the Franklin County Medical Society.

Recommendations, Reference Committee No. 4

The committee reviewed this report on the Committee on Occupational Health, Physical Medicine and Rehabilitation and moved its adoption with the reviewed Board action of August 15, 1968.

Mr. Speaker, I move the adoption of this section of the report.

(Seconded; carried)

Report of the Maternal Mortality Study Committee

The Maternal Mortality Study Committee of the Kentucky Medical Association met three times during the year, and thoroughly discussed the protocols of all maternal deaths in Kentucky through the previous year. The committee members believe this work to be a useful and productive function, and we are grateful to the officials of the Kentucky Medical Association who rescinded last year's directive to dissolve the committee.

The committee was asked to comment on the recently adopted birth certificate form for Kentucky, modeled on the proposed standard certificate designed for universal use by the Department of Health, Education and Welfare. The committee raised several questions regarding the potential usefulness of the new form, pointing out several objections expressed by various members. These have been transmitted through proper channels.

Publication of selected protocol abstracts from the committee's files in the KMA Journal was continued, and has now been increased from a bimonthly to a monthly interval. The committee continues to feel that this is a useful method of bringing the results of its deliberations to the attention of the profession in Kentucky.

Douglas M. Haynes, M.D., Chairman

Recommendations, Reference Committee No. 4

The committee reviewed this report of the Maternal Mortality Study Committee and respectfully moved its adoption.

Mr. Speaker, I move the adoption of this section of the report.

(Seconded; carried)

Report of the Communication and Health Education Committee

The Communication and Health Education Committee was one of the "revised" committees under the new KMA organizational structure.

One of our primary duties is the implementation of the KMA Orientation Program for new members. We met on January 11 to plan the Orientation session held in conjunction with the 1968 Interim Meeting. Our speakers were selected and promotional activity was authorized. A review of the record keeping and paper work involved impressed us with the administrative work load required by the Orientation Program. We had 28 new members attend our Interim Meeting session, making a total of 277 who have taken the course since it was initiated in 1965. The committee then began its preliminary planning for the seventh Orientation Course to be held on Monday, September 23, just prior to the opening of the Annual Meeting. As is customary, a larger number of new members are expected to be in attendance for this session.

It is your committee's opinion that the Orientation Program, adopted by the House of Delegates in 1964, has been of considerable value to our new members. We are most appreciative to all who have contributed to its success and especially would point out the speakers, both lay and physicians, who have appeared on the program.

Additionally, during this past year, we have maintained our interest in promoting health education. Exhibits were presented again this year at the Annual Meeting of the Kentucky Education Association and authorized for presentation at the 1969 KEA convention next April.

We have also maintained our responsibility of securing speakers for both lay and professional audiences on request.

N. Lewis Bosworth, M.D., Chairman

Recommendations, Reference Committee No. 4

The committee reviewed the report of the Committee on Communication and Health Education and the work of Doctor Bosworth and his committee and particularly the Orientation Program for new members and wishes to commend them for the work done in this field.

Mr. Speaker, I move the adoption of this section of the report.

(Seconded; carried)

Report of the Health Careers Committee

I was privileged to serve as chairman of the Health Careers Committee of the Kentucky Medical Association, and although we met only once in formal session, much of our activity was conducted through other communications media.

In review and summary, the Health Careers Committee felt that it could best serve the needs of the Kentucky Medical Association by attempting to develop or seek means for the development of a statewide health careers council which would provide a focal point for the distribution of recruitment material, information and guidance for both students and counselors, and coordinator of health careers programs and activities throughout the state among the various organizations concerned.

The committee was empowered by the Board of Trustees at the 1968 KMA Interim Meeting to seek out the availability of funds, both public and private, in support of the establishment of a full-time facility and staff to act in this manner.

It was understood, of course, that the Health Careers Committee would continue to encourage and support the ongoing programs in health careers being managed so successfully by the several auxiliary groups involved.

In the course of establishing communications with other interested organizations, the Health Careers Committee learned that an effort directed along similar lines being developed by the Kentucky Hospital Association. Correspondence with their representatives and an intense orientation into their aims and objectives provided your chairman with the definite opinion that the Kentucky Hospital Association had made much progress in the planning, as well as in the early funding of this venture. With the belief that the KHA would be objective and broad in its concepts and goals and since preliminary communication with the Ohio Valley Regional Medical Program elicited no response whatsoever, your chairman concluded that it might serve the best purposes of the Kentucky Medical Association and the Health Careers Committee to support fully the efforts of the Kentucky Hospital Association. This should include, with the advice and consent of the Board of Trustees, some financial support from the Kentucky Medical Association.

It is apparent to your chairman that the growing awareness in many areas of our Commonwealth toward the needs for increasing the supply of health manpower provides a climate much more favorable for the implementation of health careers programs, councils, etc. than has existed heretofore.

Your chairman is hopeful that the Kentucky Medical Association and this committee will see fit to increase its activity and support in this area.

Joseph Hamburg, M.D., Chairman

Recommendations, Reference Committee No. 4

Much discussion was heard on the Report of the Committee on Health Careers. The committee wishes to commend Doctor Hamburg in this field as we feel that if the physician does not take on the role of education of the paramedical field and health careers that the government or other interested parties will do so. The committee feels that further communication with the Ohio Valley Regional Medical Program be attempted and also, as suggested by the committee, that some financial support from the Kentucky Medical Association should be given. The committee requests that this part of the report be referred to the Board of Trustees for further action and implementation.

Mr. Speaker, I move the adoption of this section of the report.

(Seconded; carried after discussion.)

Report of the Community and Rural Health Committee

Your Community and Rural Health Committee met at the Headquarters Office on March 14. Since this was our first meeting under a new organizational structure, we devoted the initial part of our meeting to discussion of our duties. In brief, we are charged to continually investigate means for bettering all aspects of public and mental health in Kentucky, study all aspects of TB and TB control, and have as an objective to decrease deaths and disabilities caused by motor vehicles.

In the field of public health, we again promoted Immunization Week in Kentucky during the week of May 5-11, and wish to express our appreciation for the cooperation of the membership in this program. In addition to our routine promotion, we received considerable assistance from numerous allied organizations for which we are grateful.

The committee also encourages the promotion of Community Health Week by the county medical societies. Community Health Week is held in October nationally to emphasize local medical progress, avail-

able health facilities, and services and the individual and cooperative roles played by members of the community health team.

Highway safety continues to be of major interest to us. Through our committee, KMA is co-sponsoring the second three-year Kentucky Automotive Crash Injury Research Program. This study is concerned with injuries and fatalities in late model automobiles and we are currently about one-half way through the program which began in January of 1967. Additionally, we are maintaining our leadership in the Kentucky Driver Limitation Program and we were most pleased to see the passage of the Implied Consent Law during the 1968 session of the Kentucky General Assembly.

We continue to vigorously promote the KMA Automotive Safety Award which has now been presented to twelve organizations who have 100 percent of their membership (or employees) with seat belts installed in their vehicles. To further promote highway safety, this committee sponsored with the assistance of the Louisville Police Department an exhibit at the 1968 annual meeting of the Kentucky Education Association. We think this was most beneficial as we feel our message reached many of our teachers in this state.

Last year the House of Delegates approved an advertising program co-sponsored by KMA and the Kentucky TB Association on TB Testing. We are pleased to report that this program, via billboard advertising, was implemented in January of 1968.

Our committee maintains liaison with representatives and agencies that have similar interests in the areas of responsibilities assigned to us. For example, we maintain liaison with the Department of Mental Health and the State Mental Health Association.

Because of our varied duties, this committee is composed primarily of physicians who have chaired KMA committees in the past on the specific subject areas which have been assigned to us, that is, mental health, public health, tuberculosis, and highway safety. I am deeply indebted to these committee members for their participation and leadership in their areas of responsibility this past year.

Ralph D. Lynn, M.D., Chairman

Recommendations, Reference Committee No. 4

The committee reviewed the report of the Committee on Community and Rural Health and wishes to commend Doctor Lynn and his committee for their work during the past year.

Mr. Speaker, I move the adoption of this section of the report.

(Motion seconded and carried.)

Report of the Committee on Cults

The Committee on Cults met on two formal occasions during the Associational year. The first meeting on January 4, 1968, was concerned primarily with review of Association strategy relating to cult legislation in the 1968 Kentucky General Assembly. The second meeting on May 1, 1968, was related primarily to new programs for committee action. In addition to these two formal meetings, the Committee on Cults continued its surveillance on chiropractic advertising in the Commonwealth, and by trips to Frankfort during the Legislative Session, followed diligently Association policy relating to chiropractic legislation. The committee was gratified that the KMA legislation, House Bill 147, regarding educational qualifications for practitioners of the healing arts, was favorably passed and signed into law by Governor Nunn. The committee also worked with the Jefferson County Medical Society in continuing review of the Kentuckiana situation.

In addition, the committee is considering the problem of quackery as related to obesity treatment and as related to treatment of dyslexia by non-medical practitioners in the state.

The committee has submitted a request to the Board of Trustees to appropriate sufficient expenses to send selected medical and non-medical representatives to the Fourth National Congress on Health Quackery scheduled for the Drake Hotel in Chicago on October 2-3, 1968. The committee thought the total of six or eight special lay representatives plus the necessary representation from the Association would be of direct benefit to further activities in this area of quackery.

I, as chairman, would like to thank the members of my committee, Neal Calhoun, M.D., J. Campbell Cantrill, M.D., Kenneth Crawford, M.D., Harold Haller, M.D., Jesse Tapp, M.D, and James Willoughby, M.D., for their efforts and cooperation during the Associational year.

David B. Stevens, M.D., Chairman

BOARD ACTION: The Board approved the report noting that the recommendation requested on page one, paragraph three had been acted upon by the KMA Executive Committee at their meeting on July 25, 1968.

Recommendations, Reference Committee No. 4

The committee reviewed the Report of the Cults Committee with the exception of page 1, paragraph 3, first two sentences, which were referred to another committee. The committee wishes to commend Doctor Stevens and his committee for their work of the past year and were gratified to note the legislation that was passed and signed into law regarding this problem.

Mr. Speaker, I move the adoption of this section of the report.

(Motion seconded; carried)

Report of the Senior Day Committee

The two annual Senior Day programs were held at the University of Louisville and University of Kentucky. The University of Louisville program was held on Monday, March 18, 1968, and the University of Kentucky program was held on Tuesday, April 9, 1968.

The format followed in both places was the same as in the past with the afternoon sessions being orientation for the senior medical students of each school as to some of the ancillary aspects of the practice of medicine with such advice as has seemed pertinent.

The evening programs were conducted in conjunction with the Jefferson County Medical Society for the University of Louisville and the Fayette County Medical Society for the University of Kentucky. Charles Jarvis, D.D.S. of San Marcos, Texas, was the guest speaker at the University of Louisville program; and Dwight Wilbur, M.D., president-elect of the AMA, was the featured speaker at the University of Kentucky session.

At the end of each session, kits of materials were distributed to the students to help narrow the communication gap which is always with us. It is hoped that through the years these programs will be of some help to them and also will serve as an influence to keep them alert and interested and responsive to correspondence, programs and other informational services always readily available from the county. state and national medical groups.

We strongly encourage the continuation of these programs with the usual fall planning sessions as have been in the past. There is the feeling that perhaps the formats of these programs should be revised with some updating and it is believed that this should be on the agenda for the session.

The committee is grateful to the state Medical Association, House of Delegates, the Board of Trustees and also to Mr. Robert Cox and Mr. Gil Armstrong for their help in making it possible for us to serve in this capacity. Appreciation is also extended to the KMA members who participated: Woman's Auxiliary to KMA, University of Louisville School of Medicine, University of Kentucky College of Medicine, and the Fayette and Jefferson County Medical Societies.

Hoyt D. Gardner, M.D., Chairman

Recommendations, Reference Committee No. 4

The committee wishes to commend Doctor Hoyt Gardner particularly in the light of the good reports we have heard from the University of Louisville program. The committee feels that the Senior Day Committee should be given as much leeway as possible in the revision and updating of their program for the coming year.

Mr. Speaker, I move the adoption of this section of the report. (Seconded and carried.)

Report of the School Health, Physical Education and Medical Aspects of Sports Committee

The Committee on School Health, Physical Education and Medical Aspects of Sports met this year on February 1, with nine committee members present. The committee members expressed a keen interest in the work and goals of this committee and demonstrated a desire and willingness to work toward the realization of these goals.

We continue our strong interest in seeing school health committees activated at the county society level and urge each county medical society to appoint such committees next year with a request that the chairman's name be submitted to the KMA Headquarters Office.

Again this year, the committee was privileged to have the opportunity to present an exhibit at the 1968 Annual Meeting of the Kentucky Education Association in Louisville during April. Our exhibit was entitled "A Good School Health Program."

Since our committee membership represents all sections of the state, we had a thorough discussion concerning school health activities, physical education and the medical aspects of sports as are being implemented at the local level. Suggestions were made to initiate or accelerate programs where a lack of activity had been reported.

We have had a long and continuing interest in athletic injuries, having sponsored Athletic Injury Prevention Conferences for a number of years before turning this project over to the county societies. We are now in the process of developing a pamphlet to outline "guidelines on treatment of athletic injuries." We hope this pamphlet will assist in the standardization of treatment of such matters as heat prostration, treatment of common athletic injuries, minor fractures and dislocations, and some suggestions as relate to pre-season training. In addition, we urge physicians to offer their services to be in attendance at high school athletic contests in their community.

The committee members noted the increasing amount of federal money available to the school systems and devoted special attention to the Headstart Programs and Title I funds.

The Title I program now authorizes about $8 to $10 million which can be spent in Kentucky by school officials without medical guidance. There is a strong need for participation of physicians at the local level to help channel Title I funds so that they will be utilized more effectively for health care. With medical guidance, these funds, instead of being spent in a "helter-skelter" manner, could be used for such purposes as school examinations, preventative medicine, immunization, etc. We must get involved at the local level and our committee urges that committees be established at the local county society level to give proper medical guidance to Title I and other such medical program spending funds on medical services.

We are continuing our liaison with the Kentucky Department of Education and other statewide committees and groups who have a particular interest in the health of our school-age children.

O. B. Murphy, M.D., Chairman

Recommendations, Reference Committee No. 4

The committee reviewed the report of the Committee on School Health, Physical Education and Medical Aspects of Sports, and we would like to urge all physicians in the state of Kentucky to take an active part in the school health and physical education not only in the high school but in the grade school level and also whenever possible to see that all school athletic programs are adequately covered from a medical standpoint.

Mr. Speaker, I move the adoption of this section of the report.

(Seconded; carried.)

Report of the Advisory Committee to Woman's Auxiliary

Although this committee has had no meetings this year, we think it can be a very helpful one.

We also think that this committee should be continued.

Walter L. O'Nan, M.D., Chairman

Recommendations, Reference Committee No. 4

The Report of the Advisory Committee to Woman's Auxiliary was received, and we move its adoption.

Mr. Speaker, I move the adoption of this section of the report.

(Motion seconded; carried.)

Report of the Ad Hoc Study Committee for Improved Community Health

The Ad Hoc Committee met three times during the fiscal year 1967-1968. Unfortunately, not all members of the committee were able to attend all meetings which caused some lack of continuity. Despite this, and with the excellent cooperation of the Departments of Community Medicine and Behavioral Science at the University of Kentucky, we were able to make a start toward the formation of local committees for the development of improved community health.

Four counties were surveyed—Hardin, Bourbon, Owen and Shelby, and meetings were held with physicians of those counties for the purpose of establishing local committees to carry out the principles of the resolution of KMA of September, 1966.

The Hardin County Medical Society and the physicians of Owen County have agreed to attempt the establishment of local committees. With cooperation of the Department of Community Medicine at the University of Kentucky, two students will assist the county societies and physicians in this. Mr. Kenneth Maffett, senior medical student at the University of Kentucky, will work under Doctor Fred Rainey with

the Hardin County Medical Society. J. Murray Walker, senior medical student at the University of Kentucky, will work with Doctor Cull in Owen County.

Since these students will be working their clerkships this fall, it is, of course, impossible to report on their success prior to the meeting of the 1968 Kentucky Medical Association.

The committee recommends that no new counties be selected for survey until the results of the pilot studies in Hardin and Owen Counties are determined.

The committee recommends, since it is still in the middle of its job, that the Ad Hoc Study Committee for Improved Community Health be continued in 1968-69.

The committee further recommends that the students working in Hardin and Owen Counties might be able to develop a Journal article to submit to KMA and prepare an exhibit for the Interim Meeting of KMA, or the Annual Meeting in the fall, so that at that time it can be determined if the work of the committee should be continued after 1969. Budgeting of funds should be allowed for in 1968-69 as approved at the KMA meeting in 1967, though all was not expended this year.

Irving F. Kanner, M.D., Chairman

Recommendations, Reference Committee No. 4

Your committee studied the Report of the Ad Hoc Study Committee for Improved Community Health and wishes to commend Doctor Kanner for the work of his committee, being well aware of the amount of work this committee plans to do in the future.

Mr. Speaker, I move the adoption of this section of the report.

(Seconded; carried)

Resolution D

Fayette County Medical Society

WHEREAS, so called debt adjusters or credit arrangers have recently begun extensive operations in Kentucky; and

WHEREAS, these groups purport to relieve all debts in paying the debtors bills but in effect incur for him a greater financial obligation (estimates are made by some that 25% interest rate is charged by these groups); and

WHEREAS, there are ethical social agencies in all communities which provide counselling services and other services necessary to these debtors without charge; therefore be it

RESOLVED: that the House of Delegates of the Kentucky Medical Association urge physicians of Kentucky not to accept payment from these groups and that all physicians urge their local units of government to outlaw these groups.

Recommendations, Reference Committee No. 4

Mr. Speaker, after discussion of Resolution D, Credit Arrangers (Fayette County), your committee not only moves that Resolution D be adopted but we urge this resolution be referred to the Legislative Committee for possible further action on a state level.

Mr. Speaker, I move the adoption of this section of the report.

(Seconded and carried)

Resolution F

Fayette County Medical Society

WHEREAS, insurance forms are a necessary agent to establish claims and payment for both physician and patient; and

WHEREAS, the majority of insurance companies accept the universal form thereby expediting claims and reducing physician paperwork; and

WHEREAS, for some patients with these so called "weekly" insurance policies, frequent claim forms are demanded and with accompanying physician certification of examination, the net cost to physician and patient exceeds the value of benefit; therefore be it

RESOLVED: that the appropriate committees of the Kentucky Medical Association work with the appropriate departments of state government and with the various insurance companies to modify the procedures so that a just and realistic program be developed.

Recommendations, Reference Committee No. 4

Mr. Speaker, your committee urges the adoption of Resolution F, Insurance Forms (Fayette County).

Mr. Speaker, I move the adoption of this section of the report.

(Seconded; carried)

Resolution I

Henderson County Medical Society

WHEREAS, organized medicine has long endorsed the concept of home health care* and current health needs require the most economical use of health manpower and facilities in rural and urban areas consistent with quality care; and

WHEREAS, state and local medical societies are properly concerned with the availability and adequacy of rural health care services which support the work of the local physician;

THEREFORE BE IT RESOLVED that Kentucky Medical Association formulate and help to implement, through the county medical societies, a program to encourage physicians to utilize rural home health services with local control as they deem advisable in their communities.

Activities in which medical societies can participate to help implement the Resolution include:

1) Assist physicians in becoming aware of the home health services available in their communities, and the various methods by which their patients can pay for, or be assisted in paying for, such services;

2) Stimulate physician interest and acceptance of quality home care with the support of fiscal intermediaries; and

3) Provide assistance in community leadership—both in improving the coordination of existing home health services and in stimulating the development of new services where they are needed.

The committee discussed Resolution I — Home Health Care (Henderson County) at length and in the second and third paragraphs wishes to add, following the word "rural," the words "and urban." This committee feels that there are many places in urban areas that need the home health care as much as in rural areas. The committee urges the adoption of Resolution I.

Mr. Speaker, I move the adoption of this section of the report.

(Motion was seconded and carried.)

**In December, 1960, the AMA House of Delegates recommended that "Physicians be urged to participate in organized home care programs for any patient who can benefit from the program to promote such programs in their communities."*

Resolution K

Jefferson County Medical Society

WHEREAS, in 1966 the Kentucky Medical Association recommended and authorized the State Board of Health to write and implement a regulation requiring each physician to register his license each year with the Department of Medical Licensure of the Department of Health; and

WHEREAS, we clearly understood from Russell E. Teague, M.D., Secretary, State Board of Health, that this regulation could be properly administered producing the necessary results without a charge or annual fee; and

WHEREAS, we are now concerned with the results produced by this regulation both for the individual physician and for the collective profession which should have been accomplished by this time; and

WHEREAS, the important and necessary results in behalf of all medicine in the state should be the publication annually of an accurate, up-to-date list of all properly licensed physicians in the state by counties and alphabetically; and

WHEREAS, this resolution is not meant in any way to be critical of the staff who work in behalf of medicine in the Department of Medical Licensure of the Board of Health who we know produce the best results possible in keeping with the time, staff and money alloted to them; and

WHEREAS, we believe there is a sufficient income created by the Department of Medical Licensure to properly administer this re-registration program with good results; therefore be it

RESOLVED: that the House of Delegates of the Kentucky Medical Association urge the Board of Trustees to request a report from the Secretary of the State Board of Health, Russell E. Teague, M.D., regarding the progress thus far achieved with the new regulation concerning license re-registration and as to when we might expect the smooth effective administration of this regulation to begin and the publication of an accurate annual roster.

Recommendations, Reference Committee No. 4

Mr. Speaker, your committee discussed Resolution K, Annual Registration of License for Physicians (Jefferson County) before a full house and felt that the report requested from the Secretary of the State Board of Health, Doctor Teague, was adequately presented. Doctor Teague reports fair progress with license re-registration and brought before the committee several pitfalls that he has encountered with this program. The committee feels that the problem of re-registration of physicians should be further taken up with Doctor Teague by the Board of Trustees.

Mr. Speaker, I move the adoption of this section of the report.

(Seconded; carried)

Resolution M

McCracken County Medical Society

WHEREAS, the most effective liaison between medical staffs and hospital governing authorities, is physician voting membership on the hospital boards of trustees; and

WHEREAS, the House of Delegates of the American Medical Association has endorsed this proposal at its November 1967 meeting in Houston, and

WHEREAS, the American College of Surgeons has likewise endorsed this proposal; therefore be it

RESOLVED: That the House of Delegates of the Kentucky Medical Association endorse the idea of the necessity of having physicians as voting members of hospital boards of trustees, and that this resolution be transmitted to the Kentucky Hospital Association and to the Joint Commission on Hospital Accreditation.

Recommendations, Reference Committee No. 4

Mr. Speaker, the committee feels that Resolution M, Physicians on Hospital Boards of Trustees (McCracken County) is merely re-affirming an established policy as passed by the House of Delegates in 1967. We move its adoption on this basis.

Mr. Speaker, I move the adoption of this section of the report.

(Seconded and carried.)

Mr. Speaker, I move the adoption of the report of Reference Committee No. 4 as a whole as amended.

(Seconded; carried.)

I wish to thank Doctor John W. Harrison, Ashland; Doctor Edward N. Maxwell, Louisville; Doctor Robert E. Robbins, Greenville; and Doctor Richard J. Wever, Paris, and Mrs. Barbara Thormyer for their time and help on this committee.

REFERENCE COMMITTEE NO. 4

Kenneth M. Eblen, M.D., Henderson, Chairman
John W. Harrison, M.D. Ashland
Edward N. Maxwell, M.D., Louisville
Robert E. Robbins, M.D., Greenville
Richard J. Wever, M.D., Paris

At this point, Vice Speaker Carl Cooper, M.D., Bedford, introduced John C. Quertermous, M.D., Chairman of the KEMPAC Board to speak to the subject of KEMPAC. Doctor Quertermous presented his annual report concerning KEMPAC activities, after which the following motion was made, seconded and carried:

"That the KMA House of Delegates reaffirm its belief in the objectives of KEMPAC and AMPAC and recommends 100 percent participation by doctors and their wives; that the House also reaffirm KMA policy that there be county society billing in order to encourage this participation, and finally that the House give a vote of endorsement and encouragement of the KEMPAC organization to continue its worthwhile political efforts in the behalf of our free enterprise system and the freedom of the art and science of medicine."

REFERENCE COMMITTEE NO. 5

Walter Johnson, M.D., Paducah, Chairman

Governmental Medical Services

Reference Committee No. 5 considered the following reports:

26. Report of the Advisory Committee to Selective Service
39. Report of the Coordinating Commission on Governmental Medical Services
40. Report of the Technical Advisory Committee on Indigent Medical Care (Title XIX)
41. Report of the Advisory Committee on Title XVIII, P.L. 89-97
42. Report of the Governmental Contracts Review Committee
43. Report of the Committee on Appalachian and OEO Programs

Resolution H—Feasibility Study of a KMA Comprehensive Health Plan

Resolution J—Glaucoma Medication

Report of the Advisory Committee to Selective Service

The purpose of this committee is to try to maintain a proper balance between the distribution of medical care to the citizens of the state, and to the Armed Forces.

Calls from National Selective Service Headquarters in Washington, D.C. were made for 1070 physicians to be delivered beginning 1 July, 1968, Kentucky's quota being approximately 2%.

Your committee met on 25 January, 1968, reviewed and made recommendations to Kentucky State Selective Service, Frankfort, Kentucky on approximately 75 physicians.

This call, in accordance with regulations issued by National Selective Service Headquarters in Washington, included any physician under 35 years of age who had not completed his military obligation of two years.

In addition to the 75 physicians reviewed at the January meeting, 12 have made various appeals. These have been handled by mail, which saves extra meetings of the committee, but involves the expenditure of much time in duplicating printed or written information and forwarding same to the committee members.

The committee members have been most cooperative, and excellent support has been given us by the KMA Headquarters staff, as well as Selective Service Headquarters in Frankfort.

As chairman of the committee, I would like to appear before the appropriate Reference Committee at the September meeting, in order to answer questions which may come up.

Glenn U. Dorroh, M.D., Chairman

Recommendations, Reference Committee No. 5

The report of the Advisory Committee to Selective Service was discussed by the members of Reference Committee No. 5. It was unfortunate that the Chairman of this committee, Glenn U. Dorroh, M.D., was unable to be present. Some concern was again expressed by the members of the Reference Committee as to whether the Selective Service Headquarters accepts the recommendations of the Advisory Committee to Selective Service. We were particularly interested in the outcome of the various appeals. This is not to be regarded as a criticism of this committee that has worked so hard and diligently in this unpleasant, necessary assignment.

Mr. Speaker, I move the adoption of this section of the report.

(Seconded.)

During the discussion, a motion was made to amend this report by adding the following: "We recommend to the Board of Trustees that the appropriate authorities be contacted as to some way that as soon as physicians are selected for active military service, they be notified. Under the present situation a physician may have been selected for military service and yet not have been notified for several months, during which time he has no way in which he can plan whether he can go into practice or whether he can go into training."

The above amendment was seconded and carried. The original motion as amended carried.

Report of the Coordinating Commission on Governmental Medical Services

The commission first met on December 6, 1967, and heard a report by Donn Smith, M.D., Dean of the University of Louisville Medical School, regarding the possible directions the Ohio Valley Regional Medical Program activities could take and recommended that we favor the direction of continuing education of the physicians and paramedical personnel. The committee was in favor of this report, and some members of the commission were present at the Interim Meeting of KMA at Covington to hear the symposium on the plans of OVRMP.

Prior to and during this meeting, members of the commission were made aware of the proposed function of the commission, including the power given by the KMA to the commission to negotiate certain governmental contracts which, when passed on by the commission, would be forwarded for approval by the KMA Board of Trustees or the Executive Committee. A Letter of Agreement (with corrections) between the KMA and the Veterans Administration was read to the group with the specification that payment to physicians be on the basis of the usual and customary fee concept with reasonable limitations. The contract was agreed upon by all present and referred to George Brockman, M.D., for his signature and is now in force. The commission reviewed and discussed briefly medical programs passed by the first session of the 90th Congress and felt no specific action needed to be taken by the commission. However, the commission requested that all committees operating under it submit reports of their meetings so that the commission might be informed on all of the areas of governmental medicine. It was also recommended that information on Appalachian and OEO Programs periodically be reviewed in the KMA Journal for general dissemination to physicians throughout the state.

Comprehensive Health Planning and the Partnership for Health Amendments of 1967 were discussed, and the make-up of the Health Planning Commission for Kentucky was noted. A map showing boundaries for 15 comprehensive health planning areas of the state was distributed, and at a later meeting in June of 1968, a full explanation of the operation of this program was heard.

The portion of the AMA Board of Trustees report entitled, "Standards of Medical Care," and AMA Reference Committee Report A, which dealt with heart, cancer, and stroke, were discussed by members of the commission, and the commission recommended that the KMA go on record favoring these two reports. This recommendation was presented to the KMA Executive Committee at its meeting at Park Mammoth and was unanimously approved. A summary of the AMA Report "P", which relates to the growth of regional medical programs throughout the country, was published in the March, 1968, issue of the KMA Journal.

The second meeting was held on June 6, 1968, at which time the commission expressed its gratitude to the KMA Journal for publicizing the materials requested. Reports were heard from the various members of the commission regarding their committee activities with a somewhat comprehensive report being given by Walter Hume, M.D., on the structure and plans of the comprehensive health planning meeting which had just preceded this commission meeting. The commission voted to recommend to the KMA Board of Trustees that pressure be applied to have physicians well represented on the local planning phase of health programs under this comprehensive planning. Carroll Robie, M.D., gave a report on the activities of the Technical Advisory Committee on Indigent Medical Care (Title XIX), stating

that in July payments to physicians for out-patient services should be on a usual and customary fee basis. Frank Gaines, M.D., reported on some of the work of the Committee on Appalachian and OEO Programs, stating that an article will appear in the August issue of the KMA Journal relating to their activity. The chairman of the Advisory Committee on Title XVIII gave a report that much pressure was being put on the intermediary for Medicare, Part A, from HEW regarding claims for the use of extended care facilities for custodial care. (The Advisory Committee on Title XVIII is serving as a review board for some cases rejected by the intermediary). There was also some discussion of possible over-utilization of nursing home visits by physicians in the state and recommendations made to Metropolitan as to how this might be handled.

It is felt that this has been a less trying year for physicians in Kentucky insofar as Medicare is concerned, and there have been very few problems. There has been little difficulty with the VA contracts, and OEO and Appalachian Programs have at least had physician supervision and suggestions. All of the committees of the commission have performed in an efficient manner. The chairman of the commission wishes to commend the members of the committees very highly for their work and feels that the thanks of the entire Kentucky Medical Association are in order.

Paul J. Parks, M.D., Chairman

Recommendations, Reference Committee No. 5

The report of the Coordinating Commission on Governmental Medical Services to the 1968 Session of the KMA House of Delegates was reviewed by Reference Committee No. 5, and we wish to commend this commission for an outstanding job in the coordination of these various governmental services. Reference Committee No. 5 wishes to compliment the members of this commission on the renewal of several governmental medical program contracts on a usual and customary fee basis.

The portion of the report referring to physicians being well represented on local health planning programs cannot be over-emphasized. Reference Committee No. 5 recommends that the KMA Board of Trustees appoint each one of the 15 trustees to the appropriate regional health planning area, as set forth in the present law, and that he should be responsible for the immediate organization of a regional health planning council in his given area. The committee feels that physician leadership in these councils is of the utmost importance. As soon as the official guidelines are available, immediate action will be necessary in order to maintain physician leadership and direction of these regional health planning councils.

Reference Committee No. 5 further recommends that, in the planning of these councils, physician representation should amount to 25 percent of the entire membership of the council.

Mr. Speaker, I move the adoption and implementation of this section of the report.

(Motion seconded; carried.)

Report of the Technical Advisory Committee on Indigent Medical Care (Title XIX)

The Technical Advisory Committee on Indigent Medical Care (Title XIX) met on nine occasions during the Associational year with approximately 100% attendance at all meetings. Three of the meetings were held prior to the quarterly meetings of the Advisory Council on Medical Assistance, which were also attended by the committee members. Several of the committee meetings were held at night and were called on very short notice.

In addition to the meetings, there were a number of individual telephone calls and conference calls to the members of the committee to resolve problems.

Joint meetings have been held with members of other advisory groups, staff members of the Kentucky State Department of Health (Medical Assistance Division), the Department of Economic Security, Blue Cross-Blue Shield, and the Kentucky Dental Association.

The committee is by necessity a hard-working group. A study of the organizational structure of the Medical Assistance Program in Kentucky is a necessary part of our report to point out that this committee can only recommend and that the process of action is often slow.

The KMA Technical Advisory Committee on Indigent Medical Care (Title XIX) is a quasi-governmental body, called for by Kentucky Statutes, and is one of the six vendor groups, "established for the purpose of acting in an advisory capacity" to the Advisory Council for Medical Assistance Programs for the Commonwealth of Kentucky. The six committees, composed of five members each appointed by their respective associations, represent physicians, hospitals, dentists, nursing, pharmacy and nursing homes. The committees are, on many occasions, required to meet on short notice, often a week or less prior to the Advisory Council sessions. Our committee carries out established KMA policies and reports to the Association the activities of the state program of medical assistance under Title XIX of the Social Security Act.

The U.S. Department of Health, Education and Welfare has contracted with the Kentucky State Department of Economic Security to administer the Title XIX Program. This state department handles eligibility status and the writing of checks.

The Department of Economic Security has contracted with the State Department of Health to handle all medical aspects for all vendor groups. This assignment is handled by the Medical Assistance Division of the Department of Health.

The Advisory Council on Medical Assistance, established by Kentucky Statutes, meets at least quarterly to "develop and formulate recommendations to the Department of Health as to policies, plans, budgets, programs, rules and regulations." It is composed of 13 members. The Commissioner of Health and the Commissioner of Economic Security are ex officio members. The other 11 members of the Council include a representative of each of the following organizations: Kentucky Medical Association (E. C. Seeley, M.D.), Kentucky Dental Association, Kentucky Hospital Association, Kentucky Pharmaceutical Association, Kentucky Association of Nursing Homes and Personal Care Homes, and the Kentucky Nurses Association, plus five lay members.

The committee met several times with the Kentucky Medical Assistance Program staff, and personal contacts were made with officials of other state medical societies in regard to the new KMAP Physicians Profile procedure list, which is fairly complete now in outpatient psychiatric, surgical, OB, machine testing, allergy, x-ray diagnosis, x-ray therapy and radioactive studies, in addition to those originally proposed by KMAP, and the medicine and the limited laboratory office procedures list previously in use. The KMAP will not broaden the office laboratory procedures at this time, but may in the future. Separating outpatient surgical procedures proved quite difficult as there were regional, situational, and individual physician differences in admission for various procedures. Nearly all of the surgical section was printed at this time ensuring KMAP utilization of the 1967 KMA survey committee's fine efforts. Physicians may choose to await usual and customary coverage before submitting detailed charges to the KMAP for surgical items strictly performed in hospitals.

The initial recommendation of the Projection Com-

mittee of the Governor's Advisory Commission called for submission of the individual physician's profile as a prerequisite for usual and customary participation. By negotiations largely carried out by our capable 1966-67 chairman, Garnett Sweeney, M.D., this was modified to permit the use of KMA 1967 survey statistical results without names to project costs for budgeting purposes. The new Kentucky Medical Assistance Program procedure list requests a current profile on a voluntary basis as a compromise.

Of the first 100 million dollars spent in this and preceding Kentucky Kerr-Mills Programs since 1961, approximately 24 million went for outpatient pharmaceuticals, 33 million to hospitals, and 19 million to physicians. The KMAP director informed this committee that drug costs in the program are increasing; hence, fairly liberal maximal limits per prescription were reimposed July 1, 1968, and a computer monitoring system was devised to query the physician regarding the recipients of 15 or more prescriptions per quarter. A simple check form will enable the physician to authenticate or direct an inquiry of the recipient by a social worker regarding the number of physicians visited, etc. The physician may direct refills on the prescription or by phone. It appears that unlimited prescription of all items would further increase pharmacy costs.

The committee approved a revised combined claim form for Title XVIII-XIX patients earlier in the year. Optional physician coding of services rendered will facilitate faster payment. Title XVIII requires the diagnosis to be written.

The out-of-hospital usual and customary physician program, which was initiated on July 1, 1968, was originally scheduled February 2. This date was postponed late in 1967 with the reason given as a lack of funds announced just prior to the change in state government administration.

The Department of Economic Security reported that the original expanded budget submitted by their department prior to the recent legislature included physician in-hospital and out-of-hospital payment on a usual and customary basis, Title XVIII rates for Title XIX nursing home patients, and dental usual and customary fees, plus several other items.

The physicians increased in-hospital budget from the present to usual and customary, and dental care at usual and customary appropriations were deleted some place along the line and were not included in the budget submitted to the legislature and the Governor.

After a report from this committee, the KMA Board of Trustees issued a letter to physicians in response to the omission of in-hospital services from the 1968-70 state budget. KMA officials have held high level discussions with governmental officials regarding this and other aspects of the program.

Quarterly monitoring of physician utilization, as well as drug usage, will be followed closely by this committee. The appropriate Kentucky Medical Association committees will be referred cases of excesses for appropriate action.

The committee is continuing its efforts to get a supplemental budget during 1968-70 for usual and customary in-hospital physician services; however, the legislature is not scheduled to meet again until 1970. Other committee meetings will probably be required prior to the next Advisory Council meeting. The chairman thanks the hardworking committee members and the KMA staff for their excellent cooperation, which was essential to the function of this committee.

Carroll H. Robie, Jr., M.D., Chairman

Recommendations, Reference Committee No. 5

Reference Committee No. 5 heard considerable testimony on the Report of the Technical Advisory Committee on Indigent Medical Care (Title XIX). This committee has had one of the most difficult and frustrating assignments during the past year, and they should be complimented for their extreme diligence and persistent efforts on behalf of the Kentucky Medical Association.

Reference Committee No. 5 wishes to again confirm the policy of the KMA that usual and customary fees should be paid for all physicians' services, whether in or out of hospitals. We further feel that these usual and customary fees should be reviewed no less than on an annual basis.

At the present time, until a current profile of usual and customary fees under Title XIX is available, we urge this Title XIX Committee to seek reasonable payment for services now being rendered.

Mr. Speaker, I move the adoption and implementation of this section of the report.

(Seconded and carried.)

Report of the Advisory Committee on Title XVIII

The committee first met during the Associational year on Wednesday, February 7, 1968, with all members present. A report from an intermediary for Title XVIII, Part A, was heard with special reference to the Concept of Utilization Review for extended care facilities and the specific outlines by HEW regarding requirements for designating patients as recipients of medical care versus custodial care. The intermediary asked for recommendations from the committee as to how it could best do its work in certifying cases in extended care facilities. A motion was made and passed that the intermediary prepare a one or two page explanation for printing in the KMA Journal regarding extended care and custodial care, and this was later done for the reading of all Kentucky physicians. The intermediary requested a committee of physicians be available to help in deciding questionable cases, and the Advisory Committee on Title XVIII agreed to accept this responsibility if so designated by KMA. This willingness to serve was presented to the KMA Executive Committee and approved.

During this same meeting, a report of Medicare's first year was heard from Mr. Don Smith, Manager of the Lexington Office of Metropolitan Life Insurance Company, and it was pointed out that there were no major problems and that generally there had been good cooperation from physicians throughout Kentucky. Amendments to the Social Security Act for 1967 were discussed, and no action was needed to be taken regarding these.

The second meeting of the Advisory Committee on Title XVIII was held on Thursday, June 6, 1968, and a review was presented by Blue Cross on their handling of extended care benefits. The committee reviewed three cases at length and agreed that on the basis of information submitted, they were all primarily cases of custodial care. It was the expression of the committee that it would be much easier to review cases in the future if specific reasons were given by utilization review committees of extended care facilities as to their reasons for designating patients as in need of extended care.

A report was heard from Mr. Don Smith of Metropolitan Life Insurance Company regarding the possibility of over-utilization by physicians on visits to patients in nursing homes and extended care facilities. The committee gave verbal suggestions to Mr. Smith as to how this might be handled to the best advantage of both the physicians and Metropolitan without actually having to request specific medical records. No other problems were presented to the committee with the handling of the Medicare Program for the year 1967-68.

Paul J. Parks, M.D., Chairman

Recommendations, Reference Committee No. 5

The report of the Advisory Committee on Title XVIII, P.L. 89-97 of this committee was thoroughly studied, and it is indeed a welcome relief to see the smooth operation of Medicare during this past year.

Reference Committee No. 5 would like to emphasize that portion of the report dealing with over-utilization. We would like to remind our fellow physicians of their continued responsibility in avoiding over-utilization.

In situations of obvious over-utilization of medical services by individual patients, we urge physicians to notify the proper authorities in order to reduce these abuses.

Mr. Speaker, I move the adoption and implementation of this section of the report.

(Seconded; carried.)

Report of the Governmental Contracts Review Committee

The function of the Governmental Contracts Review Committee is to act on behalf of the Kentucky Medical Association in an attempt to resolve differences between physicians and the administrators of governmental medical care programs.

This is an enlargement of our activities in that we had previously been concerned only with the CHAMPUS Program (Civilian Health and Medical Program of the Uniformed Services). The reason for an expansion of our duties resulted from CHAMPUS, VA Home Town, and other governmental medical programs all being implemented on a "usual and customary" basis making it desirable to have one committee reviewing in questionable fee cases on a single standard.

We are pleased that as of the writing of this report no cases have been referred to us requiring a meeting of the committee during this Associational year. It is possible that a meeting may become necessary prior to the KMA Annual Session, and the committee members stand ready to meet at any time it is deemed advisable.

William H. Powers, M.D., Chairman

Recommendations, Reference Committee No. 5

Reference Committee No. 5 wishes to compliment the members of the Governmental Contracts Review Committee for their outstanding service in reviewing unusual claims submitted to them concerning governmental medical programs.

Mr. Speaker, I move the adoption of this section of the report.

(Seconded and carried.)

Report of the Committee on Appalachian and OEO Programs

The Committee on Appalachian and OEO Programs held two formal meetings during the Associational year. At the first meeting, Mr. John D. Whisman, the Kentucky representative and the Co-director of the Appalachian Regional Program, met with us to describe the general program and the medical portion in particular. At the second meeting, the Committee met with Harvey Sloane, M.D., Project Director of the Park-Duvalle Neighborhood Health Center in Louisville, Kentucky, and Mrs. Mary Jane Dunn, R.N., Director of the Middle Kentucky River Development Council. The Committee also heard a written report from Russell Hall, M.D., of the Floyd County Comprehensive Health Service Program. Each guest reported on the type of program operating in his area. Mr. C. Lynn Frazer, Director of the Office of Economic Opportunity for Kentucky, was also a guest at this meeting. Because of the diversity of the programs described and the lack of general understanding about them, the Committee recommended that all of these reports be printed in the KMA Journal. These reports appeared in the August, 1968, issue.

The Committee study revealed the following: the Appalachian Regional Program is a cooperative venture between the Appalachian states and the federal government to improve many aspects of the region, including the health of the residents. The Appalachian Program has established local planning groups, including physicians, to plan a comprehensive, region-wide grass roots approach to improve medical care. On the other hand, the Office of Economic Opportunity, through its medical program, has selected several widely separated areas for demonstration clinics. One of these in Louisville and another in a rural Eastern Kentucky area are to provide intensive comprehensive care to the poverty affected in a limited zone. Both programs have been proposed because it was felt that poverty stricken people had inadequate medical care, not only because of their financial plight, but also because charity services were fragmented and lacked coordination.

Opinions of individual members of the Committee were diverse considering these new pilot programs. All agreed, however, that since these were new experimental programs and were different from previous approaches to governmental medical care, they should be continued to be studied closely. The Committee emphasizes that this continued close study does not necessarily imply approval of the philosophy of the programs. The Committee encourages close physician appraisal of each local project by the local medical society and recommends to the KMA and to the AMA, that research be initiated to investigate other alternatives available in the delivery of medical care to the poor.

Frank M. Gaines, Jr., M.D., Chairman

This report was reviewed by the Board of Trustees on August 15, 1968.

BOARD ACTION: This report was approved with the notation that the Board reaffirms its policy that all programs for care of private patients be on a fee-for-service basis.

Recommendations, Reference Committee No. 5

Reference Committee No. 5 wishes to compliment the members of the Committee on Appalachian and OEO Programs on their continued study of the experimental programs devised to provide governmental medical care. Their continued close study of these programs is most vital.

After hearing testimony by Charles C. Rutledge, M.D., a member of the Board of Trustees, your Reference Committee recommends that the next to last sentence of this committee report be amended by adding the words, "and recommends that KMA reaffirm its policy that all programs for care of private patients be on a fee-for-service basis." This would make the entire sentence read, "The Committee emphasizes that this continued close study does not necessarily imply approval of the philosophy of the programs and recommends that KMA reaffirm its policy that all programs for care of private patients be on a fee-for-service basis."

Mr. Speaker, I move the adoption of this section of the report.

(Motion seconded and carried.)

Resolution H

Nelson County Medical Society

WHEREAS, one of the primary duties of organized medicine is to foster, plan and maintain the best possible health care in the area it serves; and

WHEREAS, the doctor is best trained, and because of his role as the core and center of health care, is in the best position to lead in the comprehensive planning of health care; and

WHEREAS, the state is assuming the role of health planner which may not only be harmful to the private practice of medicine but to the recipients of the health care, the people of Kentucky; and

WHEREAS, governmental control increases with the lack of leadership of the private sector; and

WHEREAS, physicians in the private practice of medicine now comprise less than 15% of the state council now overseeing the development of a comprehensive health plan for the state;

BE IT HERE RESOLVED that the KMA immediately study the feasibility of devising its own comprehensive health plan for the people of the state of Kentucky; and

BE IT FURTHER RESOLVED that the KMA be the leader and prime mover of such a plan and that the paramedical group be called in on a consultative basis; and lastly

BE IT RESOLVED that if and when such a plan be developed, as much of it as possible be implemented on a private basis, and the rest placed before Regional Health Councils and the legislature for its enactment and implementation.

Recommendations, Reference Committee No. 5

Reference Committee No. 5 heard considerable testimony concerning Resolution H, Feasibility Study of a KMA Comprehensive Health Plan (Nelson County). During this testimony, we learned that the Executive Committee is recommending to the Board of Trustees the establishment of a seven-member sub-committee on comprehensive health planning, which is expected to be appointed shortly.

In view of this and in light of our previous recommendations concerning regional health planning councils, we feel that this resolution duplicates many existing and planned endeavors.

Reference Committee No. 5 therefore recommends that Resolution H not be adopted.

Mr. Speaker, I move the adoption of this section of the report.

(Motion seconded and carried.)

Resolution J

Fayette County Medical Society

WHEREAS, glaucoma is a chronic disease which affects two percent of the population with blindness with all of its emotional and economic impact, and

WHEREAS, most blindness from glaucoma is preventative with proper medical and surgical care usually requiring the life-long use of certain ophthalmic solutions which are of great efficacy in the prevention of blindness, and

WHEREAS, the Kentucky Medical Assistance Program drug list contains no medications for the prevention or treatment of glaucoma, and

WHEREAS, the economic costs to the state in assistance to persons eligible for aid to the needy blind far outweigh the limited cost of a program of glaucoma prevention and treatment,

THEREFORE BE IT RESOLVED THAT the House of Delegates of the Kentucky Medical Association recommend that the Commonwealth of Kentucky Department of Health include ophthalmic solutions for the prevention and treatment of glaucoma on the Kentucky Medical Assistance drug list at the earliest possible time.

Recommendations, Reference Committee No. 5

Reference Committee No. 5 was presented with many ideas and problems related to Resolution J—Glaucoma Medication (Fayette County) and to the entire Kentucky Medical Assistance drug list. We wholeheartedly approve this resolution. We also feel that there are many other equally important drugs that should be on the Kentucky Medical Assistance drug list.

We urge a more constant and continuous review of all drugs by the Physicians Technical Advisory Committee on Indigent Medical Care (Title XIX). Reference Committee No. 5 further urges that specific requests for drugs not listed be directed to the Formulary Review Committee of the Advisory Council on Medical Assistance through the Physicians Technical Advisory Committee on Indigent Medical Care (Title XIX) for their consideration.

Mr. Speaker, I move the adoption and implementation of Resolution J.

(Seconded; carried.)

Mr. Speaker, I move the adoption of the report of the Reference Committee No. 5 as a whole as amended.

(Seconded and carried.)

Mr. Speaker, I wish to express my personal appreciation to the wise, hard-working members of this committee, as well as to Mrs. Doris Crume for her help in the preparation of this report.

REFERENCE COMMITTEE NO. 5

Walter Johnson, M.D., Paducah, Chairman
Thomson R. Bryant, Jr., M.D., Lexington
Harold L. Bushey, M.D., Barbourville
Frank M. Gaines, M.D., Louisville
Harold L. Johnson, M.D., Frankfort

REFERENCE COMMITTEE NO. 6

Robert L. McClendon, M.D., Louisville, Chairman

Constitution and Bylaws and Special Committees

Reference Committee No. 6 considered the following reports:

11. Report of the Judicial Council
12. Rural Kentucky Medical Scholarship Fund, Board of Trustees
27. Committee to Study the Constitution and Bylaws
28. Interim Meeting Program Committee
29. McDowell House Board of Managers
30. Memorials Commission
5. Report of Chairman, Board of Trustees, page 7 paragraph 3 through page 8, italicized portion only

Resolution A—Osteopathic Physicians

Resolution G—Osteopathic Physicians

Final Report of the Judicial Council

The Judicial Council met four times during the 1967-68 Associational year and considered fourteen new matters in addition to those carried over from the previous year.

Items of general interest to the profession include the following:

1. A private hospital was informed that if it constructed an office buidling for physicians, space therein should be offered to all members of its active staff.

2. A labor union, which had warned its members that physicians tended to charge higher fees to patients with insurance, was invited to submit evidence of this to the Council and assured that if substantiated, disciplinary action would be taken.

3. A group of physicians who were planning to

build a medical arts building which would contain a pharmacy was advised that it would not be ethical to fix the rent on the space occupied by the pharmacy in terms of a percentage of its gross sales.

4. After careful consideration of the practice in some small hospitals of having a physician sign Blue Shield claims for all anesthetics administered by nurse anesthetists, the Council ruled that with the sole *possible* exception of the head of the Anesthesiology Department who actually supervises and directs nurse anesthetists, it would be and is unethical for a physician who was not present and who did not supervise the anesthesia, to submit a claim for that service to Blue Shield. The Council recommended that the operating surgeon in charge sign claims for anesthetics administered by non-medical personnel.

5. A county society was advised that it is not unethical for the members of a medical group to divide one-third of its surplus earnings in proportion to fees earned by each member, one-third in proportion to length of service, and one-third equally among all members. The same society was further informed, however, that it was not good medical practice and could constitute neglect for a clinic, which is open only three days per week, to accept patients with acute ailments.

6. In its final meeting of the year, the Council reviewed its February 22, 1968, decision that hospital-based physicians must not allow the hospital to purvey their services to patients; re-affirmed that decision; and declared an end to the moratorium on its enforcement. Copies of this decision are available at the Headquarters Office.

Recommendations

A. The Council is of the opinion that a physician who has been finally (all appeals having been exhausted) convicted of a felony should be automatically disqualified for membership in the Association and required to re-apply and submit to investigation by the Council before being readmitted. At our request, the Committee to Study the Constitution and Bylaws has prepared an amendment embodying this principle for your consideration.

B. The 1967 House of Delegates, upon the recommendation of the Commission to Study the Reorganization of KMA, abolished the Insurance Review Board and assigned its responsibilities to the Judicial Council. No cases have been presented to us for review under this mandate, and the work-load has therefore not been burdensome. However, we question the propriety of our attempting to arbitrate disputes which may evolve into disciplinary cases.

Since the Insurance Review Board was never utilized and since we have not been called upon in this capacity, we recommend that we be relieved of this duty and that in the unlikely event a proper case comes to light, it be referred to a temporary (ad hoc) committee appointed for that sole purpose.

N. Lewis Bosworth, M.D., Chairman

Recommendations, Reference Committee No. 6

The Committee thoroughly reviewed this final report of the Judicial Council and approves the recommendations contained in this report as follows:

"A. The Council is of the opinion that a physician who has been finally (all appeals having been exhausted) convicted of a felony should be automatically disqualified for membership in the Association and required to reapply and submit to investigation by the Council before being readmitted. At our request, the Committee to Study the Constitution and Bylaws has prepared an amendment embodying this principle for your consideration.

"B. The 1967 House of Delegates, upon the recommendation of the Commission to Study the Reorganization of KMA, abolished the Insurance Review Board and assigned its responsibilities to the Judicial Council. No cases have been presented to us for review under this mandate, and the work-load has therefore not been burdensome. However, we question the propriety of our attempting to arbitrate disputes which may evolve into disciplinary cases.

"Since the Insurance Review Board was never utilized and since we have not been called upon in this capacity, we recommend that we be relieved of this duty and that in the unlikely event a proper case comes to light, it be referred to a temporary (ad hoc) committee appointed for that sole purpose."

However, there was considerable interest given to section 4 of page 1 of the Report of the Judicial Council; and after lengthy discussion, it was brought out that many members did not feel that the suggestions contained in section 4 adequately covered the problem of payment between Blue Shield and nurse anesthetists. The Reference Committee, in its general discussion, hopes that the Judicial Council will be aware of the several problems presented in this section of the report.

Mr. Speaker, I move the adoption and implementation of this section of the report.

(Seconded.)

After the second to this motion, the Speaker recognized Walter Cawood, M.D., Chairman of the Board of Trustees, who presented the following motion passed by the Board on September 25, 1968, and moved it as an amendment to this report: "that the Judicial Council be requested to reconsider its ruling on the billing practices of anesthesiologists and nurse anesthetists and in connection with its reconsideration that it hold a public hearing at which all viewpoints can be presented."

The motion was seconded and carried.

The original motion as amended also passed.

Report of the Rural Kentucky Medical Scholarship Fund

At the 22nd annual meeting of the Rural Kentucky Medical Scholarship Fund held on May 16, 1968, a total of 31 new and renewal loans were approved amounting to $62,000. The Fund in approving these loans now has a record of having helped a total of 299 students.

The Fund, which was established as a means of providing a better distribution of physicians in rural Kentucky, now has a total of 145 physicians in practice in 80 counties with 12 serving in "critical" counties.

There are now outstanding 378 notes to 151 borrowers for a total in excess of $444,000, most of whom are either in medical school, interning or in the Armed Services. The Fund, since its beginning, using the revolving monies available, has loaned over $870,000.

Loans are available to residents of Kentucky who have been admitted to an accredited medical school, and who will agree to practice in rural Kentucky for one year for each loan received. Currently, the Fund will lend $2,500 per year to applicants who agree to practice in counties listed as "critically in need of physicians", or in the Kentucky Public Health Service in an approved area. One year's loan is waived for each year of such practice.

Regular loans of up to $1,500 per year at an interest rate of 2% to maturity permit practice in over 100 rural counties in the state. Should a student later decide to practice in a "critical" county, one year's loan will be forgiven for each year of practice. One-half a year's loan for each year of practice in a semi-critical area will be forgiven.

The ten critical counties selected for 1968-69 on the basis of information supplied by the Kentucky Medical Association and the State Board of Health are Jackson, Knott, Crittenden, Metcalfe, Powell, Meade, McCreary, Wolfe, Rockcastle and Magoffin.

Semi-critical areas selected are Carter-Lewis, Todd, Breathitt, Martin, Butler-Edmonson, Clinton-Cumberland, Estill, Clay, Owen-Gallatin and Pendleton-Bracken-Robertson.

As an incentive to physicians entering practice for the first time, the Fund will lend $2,000, forgiving $500 per year in a critical county and $250 per year in a semi-critical area.

The Board has also approved a team concept whereby the Fund will grant a $2,000 loan to a two-physician team planning to establish practice in approved areas where the ratio is less than one physician to 6,000 inhabitants. The forgiveness features of the critical or semi-critical areas also apply to this program. The Fund would enter into an individual contract with each physician, and would not become involved in the team contract.

The Trustees have elected William S. Jordan, M.D., Dean of the College of Medicine at U. of K., and Henry S. Spalding, M.D., of Bardstown, Kentucky as new Board members. Tom F. Whayne, M.D., Associate Dean of the College of Medicine at U. of K. was appointed a liaison officer, and Robert G. Cox, Executive Secretary of KMA was named Secretary to the Fund.

The Board of Trustees is especially appreciative of the continued interest and support of Governor Louie B. Nunn, Health Commissioner Russell E. Teague, M.D. and the Kentucky General Assembly.

C. C. Howard, M.D., Chairman

Recommendations, Reference Committee No. 6

The Reference Committee reviewed the report of the Rural Kentucky Medical Scholarship Fund, Board of Trustees in detail and commends Doctor Howard and the other Trustees of the Rural Kentucky Medical Scholarship Fund.

Mr. Speaker, I move the adoption of this section of the report.

(Seconded; carried.)

Report of the Committee To Study the Constitution and Bylaws

The committee met on June 6 of this year with Mr. Gaines Davis, KMA legal counsel, to continue studying the KMA Constitution and Bylaws, implementing matters that have been referred to us, and otherwise attempting to up-date our Constitution and Bylaws.

Our initial recommendations relate to the Constitution followed by those pertaining to the Bylaws. The format for presentation is to (1) present our recommendations and reasons for submitting proposed change, (2) quote the wording of the present section of the Constitution or Bylaw, and (3) present the proposed amendment to the Constitution or Bylaw.

You may recall that changes to the Constitution must "lay over" for one year. All of the proposed changes in the Constitution, approved at the 1967 session of the House of Delegates, have been mailed to the county society secretaries as required in the Constitution (Article XII) and are being presented to you again this year for final action. If approved, they will be effective immediately.

AMENDMENTS TO THE CONSTITUTION

RECOMMENDATION

1. That there be only one vice president, elected from the same area of the state as the president.
2. That an alternate trustee be elected from each district to represent that district if the trustee is unable to attend the meeting of the Board.
3. That more than one trustee be authorized for election from a KMA district.

ARTICLE V, Officers

Present Section 1: The officers of this Association shall be a President, a President-elect, three Vice Presidents, a Secretary, a Treasurer, a Speaker and Vice Speaker of the House of Delegates, a Trustee from each district that may be established, and such other officers as may be provided for in the Bylaws.

Proposed Section 1: The officers of this Association shall be a President, a President-elect, a Vice President, a Secretary, a Treasurer, a Speaker and Vice Speaker of the House of Delegates, a Trustee and an alternate trustee from each district that may be established; and such other officers as may be provided for in the Bylaws.

Present Section 2: The duties and terms of office of all officers of the Association shall be as prescribed in the Bylaws.

Proposed Section 2: The eligibility, duties and terms of office of all officers of the Association shall be as prescribed in the Bylaws.

Section 3: No change.

Section 4: No change.

Present Article VIII: The House of Delegates shall make provision in the Bylaws for a Board of Trustees composed of one trustee from each district and such of the other officers of the Association as the House may deem appropriate, which shall be charged with the general direction of the Association's affairs during the interim between meetings of the House. The House may delegate such powers to the Board of Trustees as are not specifically required by this Constitution to be exercised by the House, and may limit the Board's powers to such extent as it may determine to be necessary or desirable. Provided, however, that in no event shall the Board of Trustees have power to commit the Association to any course of action which is contrary to or at variance with any policy established by the House of Delegates.

Proposed Article VIII. The House of Delegates shall make provision in the Bylaws for a Board of Trustees composed of one or more trustees from each district and such of the other officers of the Association as the House may deem appropriate which shall be charged with the general direction of the Association's affairs during the interim between meetings of the House. The House may delegate such power to the Board of Trustees as are not specifically required by this Constitution to be exercised by the House, and may limit the Board's powers to such extent as it may determine to be necessary or desirable. Provided, however, that in no event shall the Board of Trustees have power to commit the Association to any course of action which is contrary to or at variance with any policy established by the House of Delegates.

AMENDMENTS TO THE BYLAWS

RECOMMENDATION

Since the Association no longer has student members and since the House of Delegates has previously recommended that consideration be given to the deletion of the student memberships from the Bylaws, your committee has incorporated this deletion in a proposed Bylaw change. Additionally, the Board of Trustees has requested that the policy of KMA concerning members in the armed forces be a part of the Bylaws.

Chapter I, Section 4 of the Bylaws erroneously refers to Chapter VI, Section 4 and should refer to Chapter VII, Section 4. An addition to this section pertains to any member who might be convicted of a felony, and this is a recommendation of the Judicial Council.

CHAPTER I, Membership

Section 1: No change.

Present Section 2: Membership in the Association shall be divided into seven classes, to wit: active,

emeritus, associate, inactive, student, honorary and special.

Proposed Section 2: Membership in the Association shall be divided into seven classes, to wit: active emeritus, associate, inactive, service, honorary and special.

Paragraph a: No change.
Paragraph b: No change.
Paragraph c: No change.
Paragraph d: No change.

Present Paragraph e: *Student Members.* Any student in an accredited medical school in Kentucky or any resident of Kentucky who is a student in any accredited medical school in the United States shall be eligible for student membership. Student members shall not have the right to vote or hold office. They may apply directly to the State Association for membership and be assigned to the county society of their choice. The membership year for student members shall run from September 1 to August 31 of each year.

Proposed Paragraph e: Service Members. Members of the Association in good standing who enter military service and are ineligible for Associate membership shall be classified as service members. Service Members shall not be required to pay dues. If a member in good standing enters service prior to April 1 and has paid his dues for that year, he shall receive all publications and other benefits applicable to his class of membership in the Association and shall owe no further dues until January 1 following his release. If a member in good standing enters service prior to April 1 without paying his dues for that year, he shall receive publications and other benefits but shall owe the dues applicable to his class of membership immediately following his release from active duty. Members whose dues have not been received by April 1 are not in good standing.

Section 3: No change.

Present Section 4: Except as provided in Chapter VI, Section 4 of these Bylaws, no person who is under sentence of suspension or expulsion from any component society of this Association shall be entitled to any of the rights or benefits of membership in this Association.

Proposed Section 4: No person who is finally convicted of a felony subsequent to September 26, 1968, shall be eligible for membership in this Association unless and until, upon proper application to the Judicial Council, it is determined that he is morally and ethically qualified. Except as provided in Chapter VII, Section 4 of these Bylaws, no person who is under sentence of suspension or expulsion from any component society of this Association shall be entitled to any of the rights or benefits of membership of this Association.

RECOMMENDATION

The members of the Bylaws Committee feel there should be a cross-reference in Chapter III entitled "The House of Delegates" to Chapter XII which explains the method of electing members to the House of Delegates. This addition is being recommended to become Section 5 of this Chapter and the present Section 5 and following sections would merely be renumbered.

CHAPTER III, The House of Delegates

Section 1: No change.
Section 2: No change.
Section 3: No change.
Section 4: No change.

Proposed Section 5: The members of the House of Delegates shall be elected by the various component societies in the manner prescribed in Chapter XII of these Bylaws.

Present Sections 5-18: These sections are not changed but become Sections 6-19.

RECOMMENDATION

Recommended changes in the following portion of our report are Bylaw changes required to agree with the Constitutional change authorizing one instead of three vice presidents, inserting the election and tenure of office of delegates and alternate delegates to the American Medical Association, changes required for the addition of an alternate trustee for each trustee district, and a "housekeeping" amendment for filling vacancies on the Nominating Committee.

Present Chapter IV: Election of Officers.

Proposed Chapter IV: Election of Officers and Delegates to the American Medical Association.

Present Section 1: The President-Elect and the Vice Presidents shall be elected for a term of one year, the President-Elect succeeding to the presidency at the expiration of his term as President-Elect. The Speaker of the House of Delegates, the Vice Speaker, the Secretary and the Treasurer shall be elected for terms of three years, but no member shall be eligible for election to more than two consecutive terms as Secretary or Treasurer. Trustees shall be elected for terms of three years and shall be limited to serving for not more than two consecutive full terms. The terms of the trustees shall be so arranged that one-third of the terms expire each year, insofar as possible. No member shall be eligible for the office of President, President Elect, Vice President, Speaker or Vice Speaker of the House of Delegates, or Trustee who has not been an active member of the Association for at least five years.

Proposed Section 1: The President-Elect and the Vice President shall be elected for a term of one year, the President-Elect succeeding to the presidency at the expiration of his term as President-Elect. The Vice President shall be elected from the same general area in which the president resides. Delegates to the AMA and their alternates shall be elected for terms of two years. The Speaker of the House of Delegates, the Vice Speaker, the Secretary, and the Treasurer shall be elected for terms of three years, but no member shall be eligible for election to more than two consecutive full terms as Secretary or Treasurer. Trustees and their alternates shall be elected for terms of three years and Trustees shall be limited to serving for not more than two consecutive full terms. The terms of the Trustees and their alternates shall coincide and be so arranged that one-third of the terms expire each year, insofar as possible. No member shall be eligible for the office of President, President-Elect, Vice President, Speaker or Vice Speaker of the House of Delegates, Trustee or Alternate Trustee who has not been an active member of the Association for at least five years.

Present Section 2: During the last meeting of the regular session of the House of Delegates, the Speaker of the House of Delegates shall submit to the members of the House of Delegates a list of ten names from which, by ballot, the House of Delegates shall select five members to serve as the Nominating Committee for the next year. The five names receiving the most votes shall form the committee. The committee shall select one of its members as chairman at an organization meeting held during the Interim Meeting, or at some other appropriate place designated by the Board of Trustees at least four months before the Annual Meeting. The committee, in addition to such other meetings as it may choose to hold, shall schedule an open meeting immediately after the close of the first meeting of the House at each Annual Meeting. This open meeting shall be held in the meeting place of the House of Delegates, shall receive broad publicity, and those who have business to discuss with the committee shall have a hearing. Before noon of the following day, the committee shall post on a bulletin board near the entrance to the hall in which the Annual Meeting is being

held its nominations for each office to be filled, and shall formally present said nominations to the House at the time of the election. Additional nominations may be made from the floor by submitting the nominations without discussion or comment.

Proposed Section 2: During the last meeting of the regular session of the House of Delegates, the Speaker of the House of Delegates shall submit to the members of the House of Delegates a list of ten names from which, by ballot, the House of Delegates shall select five members to serve as the Nominating Committee for the next year. The five names receiving the most votes shall form the committee. The committee shall select one of its members as chairman at an organization meeting held during the Interim Meeting, or at some other appropriate place designated by the Board of Trustees at least four months before the Annual Meeting. The committee, in addition to such other meetings as it may choose to hold, shall schedule an open meeting immediately after the close of the first meeting of the House at each Annual Meeting. This open meeting shall be held in the meeting place of the House of Delegates, shall receive broad publicity, and those who have business to discuss with the committee shall have a hearing. Before noon of the following day, the committee shall post on a bulletin board near the entrance to the hall in which the Annual Meeting is being held its nominations for each office to be filled, and shall formally present said nominations to the House at the time of the election. Additional nominations may be made from the floor by submitting the nominations without discussion or comment. Vacancies occurring on the Nominating Committee by virtue of death, resignation, or disability, shall be filled by appointment of the Speaker.

Present Section 3: The election of officers shall be held at the second meeting of the regular session of the House of Delegates.

Proposed Section 3: The election of officers and delegates to the AMA and their alternates shall be held at the second meeting of the regular session of the House of Delegates.

Section 4: No change.

Section 5: No change.

Present Section 6: The Delegates representing the counties in each District shall form the Nominating Committee for the purpose of nominating a Trustee for the District concerned. This committee shall hold a well-publicized meeting open to all active members of the District concerned who are in attendance at the Annual Meeting for the purpose of discussing the nomination for the Trustee to serve the District. Additional nominations may be made from the floor when the Nominating Committee makes its report to the House of Delegates.

Proposed Section 6: The Delegates representing the counties in each District form the Nominating Committee for the purpose of nominating a Trustee and an Alternate Trustee for the District concerned. This committee shall hold a well-publicized meeting open to all active members of the District concerned who are in attendance at the Annual Meeting for the purpose of discussing the nomination of the Trustee and his alternate to serve the District. Additional nominations may be made from the floor when the Nominating Committee makes its report to the House of Delegates.

RECOMMENDATION

No changes are recommended for Chapter V except Sections 3 and 4 and both of these are changes required by there being only one vice president instead of three vice presidents.

CHAPTER V Duties of Officers

Section 1: No change.

Section 2: No change.

Present Section 3: The vice presidents shall assist the president in the discharge of his duties, and shall perform such other duties as may be prescribed by the Board of Trustees. In the event of a vacancy in the office of the president, the vice president from the district from which the president was elected shall succeed to the office of the president.

Proposed Section 3: The Vice President shall assist the president in the discharge of his duties, and shall perform such other duties as may be prescribed by the Board of Trustees. In the event of a vacancy in the office of the president, the Vice President shall succeed to the office of the president.

Present Section 4: The President-Elect and the Vice Presidents, when acting for and in behalf of the president, may be reimbursed for their reasonable and necessary travel expenses incurred in the performance of their duties, in such amounts as may be available out of the sum appropriated in the annual budget for traveling expenses of the president.

Proposed Section 4: The President-Elect and the Vice President, when acting for and in behalf of the president, may be reimbursed for their reasonable and necessary travel expenses in the performance of their duties, in such amounts as may be available out of the sum appropriated in the annual budget for traveling expenses of the president.

Section 5: No change.

Section 6: No change.

Section 7: No change.

Section 8: No change.

RECOMMENDATION

The only changes in Chapter VI are Sections 1 and 7. They result in the two Constitutional changes of having alternate trustees and only one vice president.

CHAPTER VI Board of Trustees

Present Section 1: The Board of Trustees shall be the executive body of the House of Delegates and between sessions of the House of Delegates shall exercise the powers conferred upon the House of Delegates by the Constitution and Bylaws. The Board of Trustees shall consist of the duly elected Trustees and the President, the President-Elect, the three Vice Presidents, the immediate Past President, the Speaker, and Vice Speaker of the House of Delegates, the Secretary, the Treasurer, and the Delegates to the American Medical Association. The Executive Committee of the Board of Trustees shall consist of the President, the President-Elect, the Secretary, the Chairman of the Board of Trustees, the Vice Chairman of the Board of Trustees, and two Trustees to be elected annually by the Board of Trustees. A majority of the full Board, to wit, 14, and a majority of the full Executive Committee, to wit, 4, shall constitute a quorum for the transaction of all business by either body. Between sessions of the Board, the Executive Committee shall exercise all of the powers belonging to the Board except those powers specifically reserved by the Board to itself.

Proposed Section 1: The Board of Trustees shall be the executive body of the House of Delegates and between sessions of the House of Delegates shall exercise the powers conferred upon the House of Delegates by the Constitution and Bylaws. The Board of Trustees shall consist of the duly elected trustees and the President, the President-Elect, the Vice-President, the immediate Past President, the Speaker and the Vice Speaker of the House of Delegates, the Secretary, the Treasurer, and the Delegates to the American Medical Association. The Executive Committee of the Board of Trustees shall consist of the President, the President-Elect, the Secretary, the Chairman of the Board of Trustees, the Vice Chairman of the Board of Trustees, and two trustees to be elected annually by the Board of Trustees. A majority of the full Board, to wit, 14, and a majority of the full Executive Committee, to wit, 4, shall constitute a quorum for the transaction of all business by either body. Between sessions of the Board, the Executive Committee shall exercise all of the powers belonging to the Board except those powers specifically reserved

by the Board to itself.

Section 2: No change.
Section 3: No change.
Section 4: No change.
Section 5: No change.
Section 6: No change.

Present Section 7: In the event of the death, resignation, removal or disability of a trustee, between sessions of the House of Delegates, the President may call a meeting of the delegates of record from the counties of that district for the purpose of submitting one or more nominees as candidates to fill the office until the trustee's disability is removed or until the next meeting of the House of Delegates. The name or names of the nominee or nominees shall be submitted to the Board, which may elect an acting trustee from them.

Proposed Section 7: In the event of the death, resignation, removal or disability of a Trustee, between sessions of the House of Delegates, the Alternate Trustee shall succeed to the office of Trustee. In case of disability, the Alternate shall serve until the disability is removed or the Trustee's term expires.

Section 8: No change.
Section 9: No change.

RECOMMENDATION

There are two changes recommended for Chapter IX, Section 1. The first is to make associate member dues $10 as requested by the Executive Committee and the second is to replace the wording of "student members" with "service members" as was done earlier in this report in Chapter I, Section 2.

CHAPTER IX, Assessments and Expenditures

Present Section 1: The annual dues for membership in this Association shall be as follows: (1) Active Members, $80, except Active Members who devote all of their time to teaching or research and have no private practice, $55; (2) Emeritus Members, no dues; (3) Associate Members, $8; (4) Inactive Members, $8; (5) Student Members, $1; (6) Honorary Members, no dues; (7) Special Members, no dues. Dues fixed by these Bylaws shall constitute assessments against the component societies. The Secretary of each component society shall forward its assessment together with its roster of all officers and members, list of delegates and list of non-affiliated physicians of the county to the Secretary of this Association as of the first day of January in each year.

Proposed Section 1: The annual dues for membership in this Association shall be as follows: (1) Active Members $80, except Active Members who devote all of their time to teaching or research and have no private practice, $55; (2) Emeritus Members, no dues; (3) Associate Members, $10; (4) Inactive Members, no dues. (5) Service Members, no dues (6) Honorary Members, no dues; (7) Special Members, no dues. Dues fixed by these Bylaws shall constitute assessments against the component societies. The Secretary of each component society shall forward its assessment together with its roster of all officers and members, list of delegates, and list of non-affiliated physicians of the county to the Secretary of this Association as of the first day of January in each year.

Section 2: No change.
Section 3: No change.

RECOMMENDATION

It is recommended that Chapter XIII be amended to permit voting on amendments to the Bylaws proposed by a reference committee.

CHAPTER XIII, Amendments

Present Chapter XIII: These Bylaws may be amended at any session of the House of Delegates by a two-thirds vote of all the delegates present at that session, after the amendment has laid on the table for one day.

Proposed Chapter XIII: These Bylaws may be amended at any session of the House of Delegates by a two-thirds vote of all the delegates present at that session, after the amendment has laid on the table for one day. Provided, however, that an amendment may be proposed in the report of a reference committee and considered by the House without having laid on the table for one day.

W. Bruce Hamilton, M.D., Chairman

This report was reviewed by the Board of Trustees on August 15, 1968.

BOARD ACTION: The Board recommends the following changes in this report:

(1) That in proposed Article V, Section 1 (page 2 of report) the first letters of "alternate" and "trustee" be capitalized.

(2) That in proposed Chapter I, Section 2 (page 4 of report) student membership not be abolished and that "Service" Memberships be added.

(3) That paragraph 2 (e) of Chapter I not be deleted and that proposed paragraph 2 (e) be adopted as paragraph 2 (f), subsequent paragraphs being renumbered accordingly.

(4) That the sixth sentence of proposed Chapter IV, Section 1 (page 7 of report) be amended by adding, after the words "insofar as possible" the following: "provided, however, that nothing contained herein shall preclude an Alternate Trustee from serving two full terms as a Trustee."

(5) That proposed Chapter VI, Section 7 (page 12 of report) be amended by adding, after the word "expires", the following: "and in the absence of the Trustee the Alternate Trustee shall vote in his place and stead."

(6) That proposed Chapter IX, Section 1 (page 13 of report) continue to include Student Members at $1 and simply add "Service Members, No dues" as (6), renumbering subsequent classifications accordingly.

Recommendations, Reference Committee No. 6

The Chairman of the Committee to Study the Constitution and Bylaws pointed out that on page 13, Chapter IX, Assessments and Expenditures, under Proposed Section 1, line 4 "Inactive Members, no dues"; this was an inadvertent error and should read "Inactive Members, $10 dues."

Also, that under Chapter I, Present Section 4 be changed to Proposed Section 4: "No person who is finally convicted of a felony subsequent to September 26, 1968, shall be eligible for membership in this Association unless and until, upon proper application to the Judicial Council, it is determined that he is morally and ethically qualified. Except as provided in Chapter VII, Section 4 of these Bylaws, no person who is under sentence of suspension or expulsion from any component society of this Association shall be entitled to any of the rights or benefits of membership of this Association."

The committee accepted these changes and moves the adoption of the report as corrected including the recommendations of the Board of Trustees on August 15, 1968, to wit:

BOARD ACTION: The Board recommends the following changes in this report:

(1) That in proposed Article V, Section 1 (page 2 of report) the first letters of "alternate" and "trustee" be capitalized.

(2) That in proposed Chapter I, Section 2 (page 4 of report) student membership not be abolished and that "Service" Memberships be added.

(3) That paragraph 2 (e) of Chapter I not be deleted and that proposed paragraph 2 (e) be adopted as paragraph 2 (f), subsequent paragraphs being renumbered accordingly.

(4) That the sixth sentence of proposed Chapter IV, Section 1 (page 7 of report) be amended by adding, after the words "insofar as possible" the following: "provided, however, that nothing contained herein shall preclude an Alternate Trustee from serving two full terms as a Trustee."

(5) That proposed Chapter VI, Section 7 (page 12 of report) be amended by adding, after the word "expires", the following: "and in the absence of the Trustee the Alternate Trustee shall vote in his place and stead."

(6) That proposed Chapter IX, Section 1 (page 13 of report) continue to include Student Members at $1 and simply add "Service Members, No dues" as (6), renumbering subsequent classifications accordingly.

Mr. Speaker, I move the adoption of this section of the report.

(Seconded.)

In the discussion of this report, the following motion to amend the report was made: that the proposed Article VIII of the Constitution as presented in the Report of the Committee to Study the Constitution and Bylaws be approved and that the present Article VIII be retained.

This motion was seconded and after discussion passed.

The original motion as amended carried.

Report of the Interim Meeting Program Committee

The Interim Meeting Program Committee met November 15, 1967, at the White House Inn, Covington, to plan the 1968 session to be held at that location.

The committee members inspected the facilities available at the White House Inn and expressed satisfaction with arrangements that could be made. A review was made of the 1967 meeting before considering the plans for the 1968 session.

After determining that the format of the program would be similar to that of the previous year, plans for the promotion of attendance were discussed and agreed upon with the Woman's Auxiliary lending appropriate support. Details of the three sessions then planned were the opening dinner meeting, the morning general session, and the closing luncheon session. Coordination of related meetings held in conjunction with the Interim Meeting was authorized.

"The Era of Partnership" was the theme decided upon following which speakers and alternate speakers were chosen.

Your committee wishes to express appreciation to the Woman's Auxiliary and the Campbell-Kenton and Boone County Medical Societies for their cooperative efforts in helping make this program a success.

George F. Brockman, M.D., Chairman

Recommendations, Reference Committee No. 6

Reference Committee No. 6 reviewed the report of the Interim Meeting Program Committee and commends KMA for its excellent meeting at Covington.

Mr. Speaker, I move the adoption of this section of the report.

(Seconded and carried.)

Report of the McDowell House Board of Managers

Your committee reports that the McDowell House, Apothecary Shop and the garden are in the best condition ever in the history of the restoration of this house.

Improvements and repairs are constantly required, but have been in minor degree in the past year. This has included some painting, repairs of plumbing and carpentry work.

More than 3,000 visitors, usually from distant areas, have visited the house during the year. Professor John Stallworthy of Oxford University was enthusiastic of the splendid restoration and considered this house one of the most important shrines in the entire world.

An exhibit relating to the McDowell House and Ephraim McDowell was presented by request to the American College of Surgeons in Chicago.

An up-to-date insurance appraisal is to be made this fall. It is hoped that 80 percent of the value may be insured, if possible. Photographs of the details of the house are to be made for a permanent record of the house. Increase in insurance in certain areas is undoubtedly necessary.

The floor structure of the house will have evaluation this fall, as suggested by the Department of the Interior.

During the year, 3,000 invitations to contribute to the maintenance of the McDowell House have been mailed to physicians in distant areas of the United States.

Your committee has met in the house in Danville on three occasions during the year with 90 to 100 percent attendance. The symbol of this house and the status of its restoration continue as a source of pride for the members of the Kentucky Medical Association, and revere the memory of its pioneer surgeon.

Laman A. Gray, M.D., Chairman

Recommendations, Reference Committee No. 6

Reference Committee No. 6 reviewed the report of the McDowell House Board of Managers and encourages the continued support of this worthy program.

Mr. Speaker, I move the adoption of this section of the report.

(Motion seconded; carried.)

Report of the Memorials Commission

The Memorials Commission met once during the past year, on 24 April, 1968, at the Kentucky Medical Association Headquarters.

We take pleasure in acknowledging the "transfer" from the Rural Kentucky Medical Scholarship Fund the gifts from Mrs. Frank J. Snider of Elizabethtown, Kentucky. These are a diploma in medicine from the University of Louisville, and a certificate of attendance at the Louisville Dispensary, both for the year 1868, and a copy of a paper by Garrett D. Smock, M.D., Mrs. Snider's father.

Concerning the matter of an oil portrait of our first president, William L. Sutton, M.D., of Georgetown, we have only to report that Mrs. Woodford B. Troutman has indicated that she would be pleased to paint a portrait if we could supply a few photographs of Doctor Sutton. With the aid of J. C. Cantrill, M.D. of Georgetown, we have been able to locate *only* photographs of the original oil portrait of Doctor Sutton. Copying from a portrait is not done by artists. We shall continue to seek an original photograph of our first president of KMA.

James M. Stevenson, M.D. of Brooksville, a member of our Commission, has placed a small desk in the President's Office to provide a place for a Guest Register.

An exhibit of some of our museum pieces in conjunction with photographs of other pieces of contemporary medical equipment will be prepared by the Commission for the forthcoming KMA meeting.

A list is being prepared of the known *Transactions of the KMA* that were published. This list will be

published and also circulated at the forthcoming meeting in an effort to obtain copies of the *Transactions* that will make our collection complete.

The Memorials Commission was requested by the Board of Trustees to implement the dedication of the present Headquarters Building in honor of the late Joseph P. Sanford, Executive Secretary. At the suggestion of J. Duffy Hancock, M.D., the following citation was agreed upon to be inscribed on a plaque:

The Joseph P. Sanford Memorial Building

"He dedicated his life and energies toward the betterment of Kentucky medicine"

Joseph P. Sanford
KMA Executive Secretary
1951 - 1968

This plaque will be unveiled at a simple ceremony at the President's Luncheon on Wednesday, 25 September, 1968, during the KMA Annual Meeting. It is suggested that Mrs. J. P. Sanford be at the President's table and that Doctor Brockman make the appropriate remarks for the unveiling.

Eugene H. Conner, M.D., Chairman

Recommendations, Reference Committee No. 6

Reference Committee No. 6 reviewed this report of the Memorials Commission and heartily endorses the citation concerning our late Executive Secretary, J. P. Sanford.

Mr. Speaker, I move the adoption of this section of the report.

(Seconded; carried.)

(The following was split from the Report of the Chairman, Board of Trustees, the main portion of the Report having been referred to Reference Committee No. 1.)

The 1967 House of Delegates rejected a proposal submitted by the Board last year concerning the redistricting of KMA Trustee Districts and mandated that more study be given to this matter. After reconsidering this during the 1967-68 Associational year, the members of the Board feel that the problem had perhaps been approached from the wrong angle, and that the development of multi-county units on a voluntary basis should be considered prior to redistricting the entire state. It was felt that the encouragement of the consolidation of sparsely populated counties into one multi-county society would be desired. Following a full discussion, the Board recommends that Chapter XII, Section 5 of the Bylaws be amended as follows:

Present Chapter XII, Section 5. In sparsely settled sections two or more component societies may join for scientific programs, the election of officers, and such other matters as they may deem advisable. The component societies thus combined shall not lose any of their privileges or representation. The active members of each component society shall annually elect at least a Secretary and Delegate for the transaction of its business with the Association.

Proposed Chapter XII; Section 5. Two or more adjacent component societies may combine into one multi-county component society by adopting resolutions to that effect at special meetings called for that purpose on at least ten days' notice. Copies of the resolutions, certified as to their adoption by the Secretary of each society, shall be forwarded to the Headquarters Office. If approved by the Board of Trustees, the multi-county society shall thereupon be issued a charter, the consolidating county societies shall cease to exist and the multi-county society shall become a component society of this Association.

Recommendations, Reference Committee No. 6

The committee heard from many members and considered all comments at length on the Report of Chairman, Board of Trustees—Page 7, paragraph 3 through page 8 italicized portion only.

The committee recommends that the Proposed Chapter XII, Section 5, be presented to the House of Delegates for consideration.

"Proposed Chapter XII: Section 5. Two or more adjacent component societies may combine into one multicounty component society by adopting resolutions to that effect at special meetings called for that purpose on at least ten days' notice. Copies of the resolutions, certified as to their adoption by the Secretary of each society, shall be forwarded to the Headquarters Office. If approved by the Board of Trustees, the multi-county society shall thereupon be issued a charter, the consolidating county societies shall cease to exist and the multi-county society shall become a component society of this Association."

It was the final recommendation of the majority of Reference Committee No. 6 that this proposed section be adopted.

Mr. Speaker, I move the adoption of this section of the report.

(Seconded.)

Following this action, Doctor Greathouse recognized a delegate from the floor who moved that the Proposed Chapter XII, Section 5 of the Bylaws, as presented by the Reference Committee from the Report of the Board of Trustees, be amended to read as follows:

Section 5. In sparsely settled sections two or more component societies may join for scientific programs, the election of officers, and such other matters as they may deem advisable. The component societies thus combined shall not lose any of their privileges or representation. The active members of each component society shall annually elect at least a Secretary and a Delegate for the transaction of its business with the Association.

Two or more adjacent component societies may also combine into one multi-county component society by adopting reoslutions to that effect at special meetings called for that purpose on at least ten days' notice. Copies of the resolutions, certified as to their adoption by the Secretary of each society, shall be forwarded to the Headquarters Office. If approved by the Board of Trustees, the multi-county society shall thereupon be issued a charter, the consolidating county societies shall cease to exist and the multi-county society shall become a component society of this Association. Provided, however, that the active members residing in each county comprising the multi-county society shall be entitled to elect a delegate or delegates to the House of Delegates, as if each such county constituted a component society within the meaning of Section 12 of this Chapter and provided, further, that multi-county societies may elect, at large, one alternate delegate for each delegate to which it is entitled under this section and such alternate may serve in the absence of the delegate for whom he is the designated alternate.

The motion was seconded. Chairman of the Board Cawood was recognized and stated that the Board of Trustees, at its September 25, 1968, meeting voted to endorse the above amendment.

After discussion, the amendment was adopted.

The original motion as amended was then adopted.

Resolution A

KMA Board of Trustees

WHEREAS, the American Medical Association and the Kentucky Medical Association have determined that voluntary professional association between physicians for medicine and osteopathy is ethical (Resolution B, KMA Annual Meeting, 1961), and

WHEREAS, many osteopathic physicians have been practicing in general medical hospitals for a

number of years, and

WHEREAS, many of the osteopathic physicians have benefitted from their association with medical doctors and have expressed a desire to develop a closer professional relationship with medical societies, and

WHEREAS, some of these same osteopaths have withdrawn their membership from the American Osteopathic Association because of professional and ethical considerations, and

WHEREAS, upon withdrawing from their society they are left without a spokesman, and

WHEREAS, in its June 1967 convention the AMA approved a resolution calling for the development of "a method whereby qualifications of osteopathic physicians who are willing to subscribe to the principles of medical ethics of the AMA and who express the wish to join a component (county) medical society may be evaluated in order to determine eligibility for internship and residency training in AMA-approved hospital programs without jeopardizing the hospital's accreditation status," (Resolution 3 (A-66) introduced by the Ohio Delegation), and

WHEREAS, osteopaths are to be considered on an individual basis for membership in component medical societies and on hospital staffs, therefore be it

RESOLVED: that all component medical societies of KMA be permitted to offer associate memberships to their local osteopathic physicians on this individual basis. and. be it further

RESOLVED: that Chapter I. Section 2 (c) of the KMA Bylaws be amended to include osteopathic physicians among those eligible for associate membership. and be it further

RESOLVED: that although associate members are not entitled to vote or hold office, they should be encouraged to attend and participate in the monthly meetings, scientific and educational programs. and other Association activities.

Resolution G

Fayette County Medical Society

WHEREAS, the Fayette County Medical Society is in agreement with the principals of Resolution A concerning osteopathic physicians introduced by the KMA Board of Trustees; and

WHEREAS. some osteopathic physicians do appear to be qualified; therefore be it

RESOLVED: that the Bylaws of the Kentucky Medical Association be amended so as to provide for the inclusion of qualified osteopaths as associate members of component societies and of the Kentucky Medical Association. upon recommendation by a component society; and be it further

RESOLVED: that these associate members be allowed to attend and participate in the meetings. scientific, and educational programs of both the component societies and the Kentucky Medical Association.

Recommendations, Reference Committee No. 6

Resolution A—Osteopathic Physicians (Board of Trustees) and Resolution G—Osteopathic Physicians (Fayette County) were studied together and various opinions were heard by the Reference Committee. It is the recommendation of the Reference Committee No. 6 that the resolution as explained in Resolution A—Osteopathic Physicians (Board of Trustees) be adopted.

Mr. Speaker, I move the adoption of this section of the report.

(Seconded; carried.)

Mr. Speaker, I move the adoption of the Report of Reference Committee No. 6 as a whole as amended.

(Seconded and carried.)

Mr. Speaker, I wish to take this opportunity to express my sincere appreciation for the work of the other members of this committee and to Mrs. Roessler for her assistance in the preparation of this report.

REFERENCE COMMITTEE NO. 6

Robert L. McClendon, M.D., Louisville. Chairman
John M. Baird, M.D., Danville
Richard B. McElvein, M.D., Lexington
B. Presley Smith, Jr., M.D., Hawesville
Dixie Snider, M.D., Springfield

Unfinished Business

Doctor Greathouse called upon Walter Cawood, M.D., Chairman of the Board of Trustees, for the final report of the Board, which read as follows:

The KMA Bylaws provide that the Judicial Council be composed of five members, four of these members to be elected by the House of Delegates with terms staggered so that one member will be elected each year. The KMA Secretary, who is elected by the House, automatically serves as a member of the Council.

According to the Bylaws, Chapter VII, Section 1, "to be eligible for membership on the Judicial Council, a nominee shall possess at least one of the following qualifications: (1) Have served one term as an officer, trustee, or as Delegate to the AMA, or (2) Have served five years as a member of the House of Delegates."

The Bylaws provide that the Board of Trustees shall nominate at least one candidate for each vacancy and that additional nominations may be made from the floor.

The term of J. Duffy Hancock, M.D., Louisville, expires with this meeting. The Board of Trustees has unanimously voted to nominate Doctor Hancock to succeed himself for a four year term.

Doctor Cawood moved the adoption of this report. Motion was seconded and carried.

Election of Officers

The Speaker asked for the Report of the Nominating Committee from its Chairman, W. Faxon Payne, M.D., Hopkinsville. Doctor Payne read the following list of nominations for the positions as noted:

President-Elect (Eastern)	Walter L. Cawood, M.D., Ashland
Vice President (Central)	Edwin P. Solomon, M.D., Louisville
Speaker of the House	Richard F. Greathouse, M.D., Louisville
Vice Speaker of the House	Carl Cooper, Jr., M.D., Bedford
AMA Delegate	J. Thomas Giannini, M.D., Louisville
AMA Alternate Delegate	Charles G. Bryant, M.D., Louisville

After each nomination was presented. the Speaker called for nominations from the floor. As no nominations were received, it was moved and seconded that the nominees be elected.

Motion carried.

Doctor Cawood, the President-Elect, was escorted to the podium and received a standing ovation.

The following nominations for the office of trustee were also submitted by Doctor Payne:

First District	C. C. Lowry, M.D., Murray
Third District	Thornton E. Bryan, Jr., M.D., Cadiz
Fourth District	W. Bruce Hamilton, M.D., Shepherdsville
Twelfth District	Robert N. McLeod, Jr., M.D., Somerset
Fourteenth District	Ballard W. Cassady, M.D., Pikeville

Doctor Payne stated that because of the elevation of the Trustee from the Thirteenth District to the office of President-Elect, the following nomination was offered to fill this unexpired term:

Thirteenth District	Paul E. Holbrook, M.D., Ashland

The same procedure followed in the election of the general officers was followed in the election of the trustees. There were no nominations from the floor, and the above-named nominees were elected.

Doctor Payne proceeded with his report, stating that the amendment to the Constitution authorizing an Alternate Trustee for each of the 15 districts had been approved by the House and that he would now present these 15 nominations. Doctor Payne read the entire list of nominees for Alternate Trustees after which a motion was made and seconded that these nominees be elected.

Motion carried.

This list follows:

First District	Carroll Traylor, M.D., Calvert City
Second District	Kenneth Eblen, M.D., Henderson
Third District	Fred Scott, M.D., Madisonville
Fourth District	Emmett Wood, M.D., Bardstown
Fifth District	W. Fielding Rubel, M.D., Louisville
Sixth District	James O. Willoughby, M.D., Bowling Green
Seventh District	Thomas P. Leonard, M.D., Frankfort
Eighth District	Donald K. Dudderar, M.D., Newport
Ninth District	James Ferrell, M.D., Paris
Tenth District	Irving F. Kanner, M.D., Lexington
Eleventh District	Hugh Mahaffey, M.D., Richmond
Twelfth District	Paul Sides, M.D., Lancaster
Thirteenth District	A. B. Richards, M.D., Louisa
Fourteenth District	James Holbrook, M.D., Prestonsburg
Fifteenth District	Harold Bushey, M.D., Barbourville

Nominations for Kentucky Physicians Mutual, Inc., Board of Directors

The following list of nominees for the Board of Directors, Kentucky Physicians Mutual, Inc., was submitted and received for information.

Everett H. Baker, M.D., Louisville
William H. Cartmell, M.D., Maysville
Delmas M. Clardy, M.D., Hopkinsville
Hubert C. Jones, M.D., Berea
Ralph D. Lynn, M.D., Elkton
J. Vernon Pace, M.D., Paducah
John T. Walsh, M.D., LaGrange
Charles Bisig, M.D., Louisville
Guy Cunningham, M.D., Ashland
Walter Cawood, M.D., Ashland
Hoyt D. Gardner, M.D., Louisville
Howard B. McWhorter, M.D., Ashland
Fred C. Rainey, M.D., Elizabethtown
Keith P. Smith, M.D., Corbin
David B. Stevens, M.D., Lexington

Election of 1968 Nominating Committee

Elected to serve as the Nominating Committee for the 1969 Annual Meeting were the following physicians:

David A. Hull, M.D., Lexington
Joseph R. Miller, M.D., Benton
Fred C. Rainey, M.D., Elizabethtown
William P. VonderHaar, M.D., Louisville
J. Sankey Williams, M.D., Nicholasville

Henry B. Asman, M.D., Louisville, was installed as President, the oath of office being administered by the Chairman of the Board of Trustees, Walter L. Cawood, M.D. President Asman then presented the Past President's Plaque to the retiring president, George F. Brockman, M.D., thanking him on behalf of the members of KMA for his loyal and dedicated service to the Association as its president.

Doctor Brockman invited all members and guests to a reception in his suite immediately following adjournment of the House.

Doctor Scheen announced that the Board of Trustees would meet at 12:30 p.m. on Thursday and specially urged the newly elected officers and trustees to be present.

The Speaker of the House adjourned the second session of the 1968 House of Delegates at 10:40 p.m.

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Cobalamin Concentrate, N.F., equivalent to Cobalamin (The total vitamin B_{12} activity in the Special Liver-Stomach Concentrate, Lilly, and the Cobalamin Concentrate, N.F., is 15 micrograms.)	7.5 mcg.
Iron, Elemental (as Ferrous Fumarate)	110 mg.
Ascorbic Acid (Vitamin C)	75 mg.
Folic Acid	1 mg.

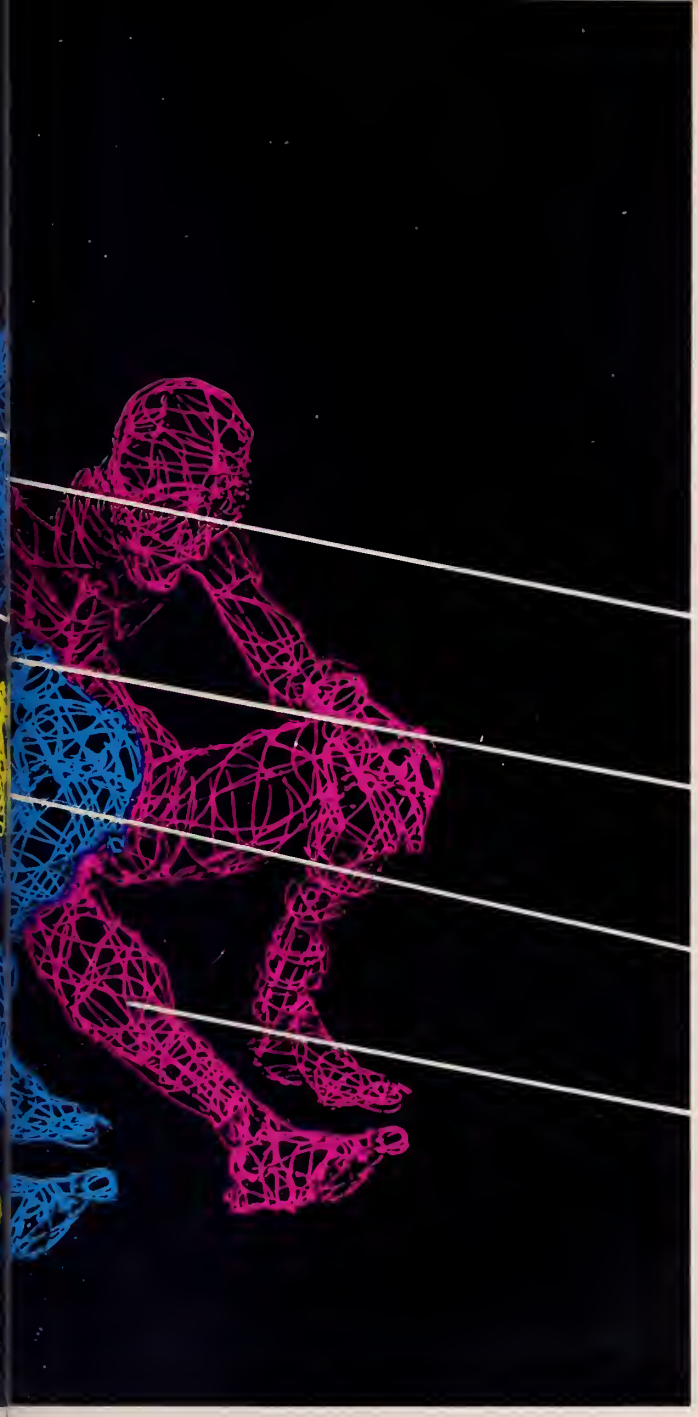
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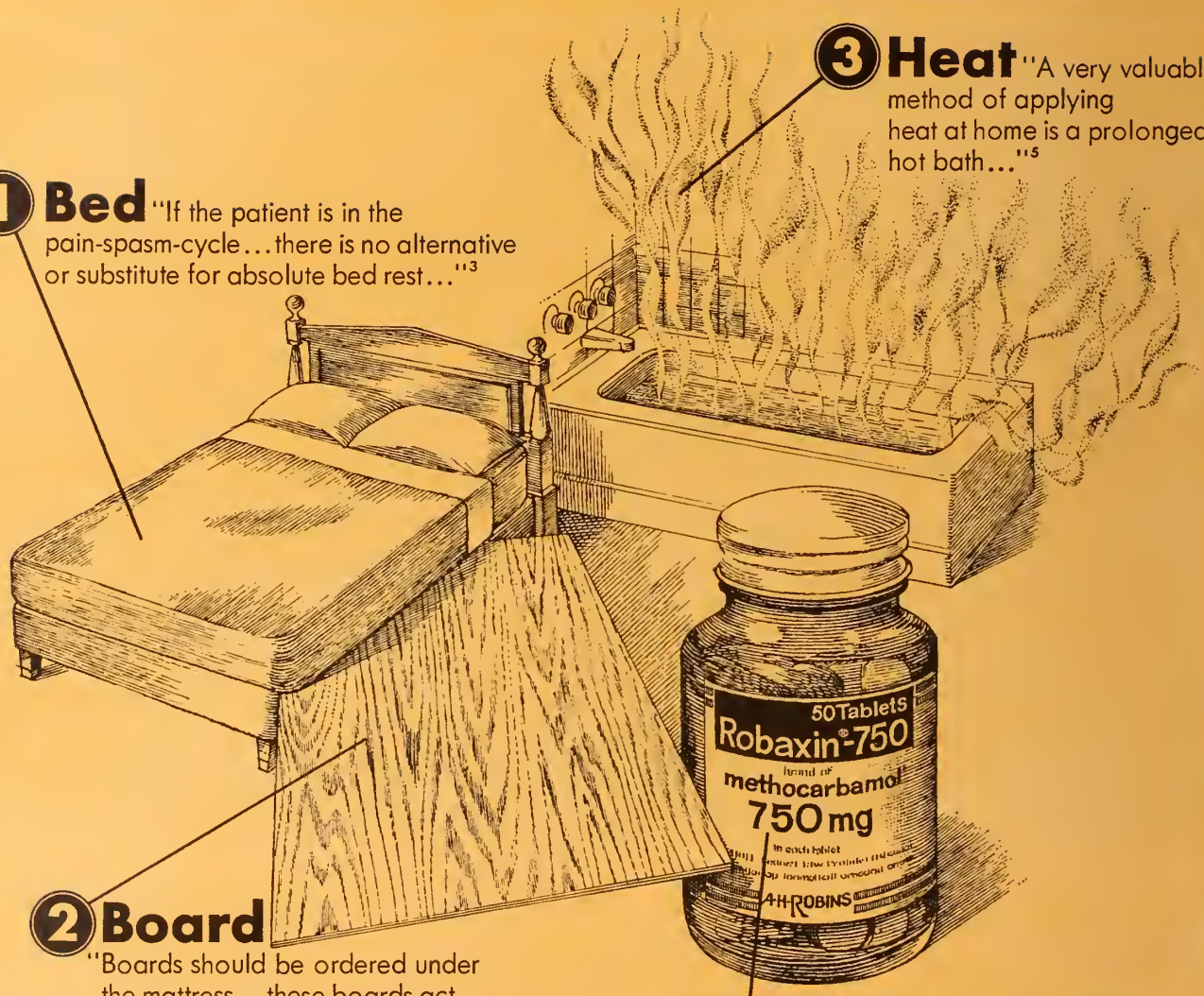
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References: (1). Gadfrey, C.M.: Applied Therap. 8:950, 1966. (2). Gattschalk, L.A.: GP 33:91, 1966. (3). Rawe, M.L.: J. Occup. Med. 2:219, 1960. (4). Cazen, L.: Sauth Dakata J. Med. 18:26, 1965. (5). Sata-Hall, R.: Med. Sc. 14:23, 1963. (6). Weiss, M. and Weiss, S.: J. Am. Osteapath. A. 62:142, 1962. (7). Feuer, S.G., *et al.*: New Yark J. Med. 62:1985, 1962.

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ORGANIZATION SECTION

1969 Interim Meeting To Be March 26-27 in Lexington

"The Challenge We Face in 1969" will be the theme of the 1969 Interim Meeting of the Kentucky Medical Association March 26 and 27 at the Continental Inn, Lexington, according to Henry B. Asman, M.D., Louisville, KMA president and chairman of the Interim Meeting Program Committee.

Prominent guest speakers have been invited to discuss the topics of "Comprehensive Health Planning" and "Health Manpower" at the meeting. The names of the speakers will be released in the January issue of *The Journal,* Doctor Asman said.

An Orientation Program for new members and a meeting of the Woman's Auxiliary to KMA are planned in connection with the Interim Meeting. Reservation cards will be sent to members with *The Communicator* and Doctor Asman urges all physicians to make their reservations at an early date.

Annual Methodist Hospital Postgraduate Day Set

The Fourth Annual Postgraduate Day Symposium at Methodist Evangelical Hospital has been scheduled January 15, at the hospital in Louisville, according to Ralph M. Denham, M.D., chairman of the program committee.

"Clinical Disturbances in Electrolyte and Acid Base Metabolism" will be the theme of the symposium in which hospital staff members will participate. They include Edward J. Fadell, M.D., William Anderson, M.D., Sidney G. Marcum, M.D. and Robert L. Rainey, M.D.

William C. Waters, III, M.D., Atlanta, Ga., guest speaker on the program, will give talks at both the morning and afternoon sessions. Doctor Waters is an associate professor of medicine at Emory University School of Medicine and a member of the Emory University Clinic staff.

KEMPAC Elects Officers At Annual Board Meeting

John C. Quertermous, M.D., Murray, was re-elected chairman of the KEMPAC Board at its annual meeting held in conjunction with the KMA Legislative Committee meeting November 7 in Louisville.

Other officers re-elected include C. Kenneth Peters, M.D., Jeffersontown, secretary-treasurer; and Fred C. Rainey, M.D., Elizabethtown, executive committee member. New Board members are Mrs. Hoyt D. Gardner, Louisville; Mrs. C. C. Lowry, Murray; and Mrs. David B. Stevens, Lexington.

Doctor Quertermous reported at the meeting that KEMPAC had reached its membership goal of 900 in 1968 and that candidate support in the recent elections had been very effective.

A new membership plan for 1969 was announced, under which dues will be $35 for a family membership in KEMPAC. This plan will also entitle KEMPAC members to membership in AMPAC.

KMA Auxiliary Fall Conference Held November 14 in Louisville

A highlight of the Annual Fall Conference of the Woman's Auxiliary to KMA was a discussion of "Marijuana and Drugs" presented by Lt. Fred Romele, head of the Jefferson County Police Department's section on vice.

Mrs. William McBeath, Lexington, Auxiliary president, presided at the conference November 14 at the KMA Headquarters Office. Approximately 50 Auxiliary members attended the session.

Mrs. McBeath and Mrs. Hoyt Gardner, Louisville, president-elect, reported on the Conference of Presidents and Presidents-Elect held in Chicago and the Southern Regional Workshop held in New Orleans. Topics discussed included AMA-ERF, Community Service, Health Careers and Safety Disaster.

Mrs. James Rich, Lexington, gave a review of her book "Women Behind Men in Medicine" during the luncheon at Big Spring Country Club. A board meeting followed the luncheon.

KNA Holds 62nd Convention Oct. 9-11 in Louisville

The Kentucky Nurses Association held its 62nd Annual Convention October 9-11 at the Kentucky Hotel, Louisville. The theme of the meeting was "Focus on Standards."

Topics discussed during the three-day session included geriatrics, burns, professional development, psychotherapeutic nursing and standards and drugs. Hoyt D. Gardner, M.D., Louisville, participated in a panel discussion on "Survival of Standards" on October 10.

Miss Ruth Spurrier, Frankfort, director of public health nurses for the state of Kentucky, was named KNA president during the meeting. Mrs. Effie Kemp, Murray, was elected vice president. Miss Lillian

cklette, Louisville, was named to a fourth term treasurer.

Miss Spurrier succeeds Mrs. Marjorie B. Glaser, isville, who presided at the convention.

Thirteen Physicians Join Kentucky Medical Assoc.

Thirteen physicians recently joined the Kentucky dical Association, according to the records of the nbership department as of November 15.

New members in Lexington are George L. Foster, D., J. William Hollingsworth, M.D., William R. rritt, Jr., M.D., John W. Yarbro, M.D. and hen J. Zwirek, M.D.

n Louisville the new members are Loretta T. is, M.D., James A. Payne, M.D., John F. onds, M.D., John G. Stober, M.D., and Donald Wright, M.D.

Other new members include Robert K. Johnson, D., Covington, Jack D. Bland, M.D. and Augustin ra, M.D., Henderson.

Radiologists Choose Officers

Walter L. Cawood, M.D., Ashland, KMA presi-t-elect, was also named president-elect of the ntucky Chapter, American College of Radiology, September meeting in connection with the KMA nual Meeting. Charles K. Mahaffey, M.D., Dan-e, will take office as president in January. Other cers will include Joan Hale, M.D., Louisville, retary-treasurer, Frank A. Bechtel, M.D., Louis-e, councilor, and Robert D. Shepard, M.D., Lex-ton, alternate councilor.

Orthopaedic Soc. Holds Election

The Kentucky Orthopaedic Society, meeting in nection with the KMA Annual Meeting in Sep-mber, named Wayne W. Kotcamp, M.D., Louisville, sident. Other officers include Joseph Stiles, M.D., ensboro, vice-president, and Stanley Collis, M.D., isville, secretary-treasurer.

Dr. Isaacs To Head Urologists

The Kentucky Urological Association elected rom Isaacs, M.D., Louisville, president during its tember meeting at the time of the KMA Annual eting. Lonnie Howerton, M.D., Louisville, was cted secretary-treasurer.

Chest Physicians Elect Officers

W. Burford Davis, M.D., Louisville, was elected sident of the Kentucky Chapter, American Col-e of Chest Physicians, during a September session d in connection with the KMA Annual Meeting. l Pichardo, M.D., Glasgow, was named secretary-asurer.

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KMA Committees and Commissions for the 1968-69 Associational Year

ANNUAL MEETING ACTIVITIES

Scientific Program Committee

Peter P. Bosomworth, M.D., Lexington, Chairman
Henry B. Asman, M.D., Louisville
Walter L. Cawood, M.D., Ashland
M. Randolph Gilliam, M.D., Lexington
R. Glenn Green, M.D., Owensboro
J. T. Ling, M.D., Louisville
J. Sankey Williams, M.D., Nicholasville

Scientific Exhibits Committee

Thomas R. Marshall, M.D., Louisville, Chairman
Benjamin B. Jackson, M.D., Louisville
Arnold C. Williams, M.D., Lexington

Awards Committee

Richard F. Grise, M.D., Bowling Green, Chairman
William A. Blodgett, M.D., Louisville
Frank L. Duncan, M.D., Monticello
C. Wayne Franz, M.D., Ashland
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To be appointed.

ASA Re-elects Dr. Lykins

Robert W. Lykins, M.D., Louisville, was re-elected vice speaker of the House of Delegates of the American Society of Anesthesiologists during its Annual Meeting October 23 in Washington, D.C. Doctor Lykins is on the staff of a number of Louisville Hospitals and serves as Louisville's First Ward alderman.

Retinoblastoma Clinic Formed

St. Jude Children's Research Hospital, Memphis, Tenn., recently announced the establishment of a Retinoblastoma Clinic for the diagnosis and treatment of retina diseases in children. Additional information may be obtained from Charles B. Pratt, M.D., 332 North Lauderdale, Memphis, Tenn. 38101.

In Memoriam

JOHN R. AKER, M.D.
Booneville
1901-1968

John R. Aker, M.D., 67, an Owsley County physician for 36 years, died October 30 at his home. Doctor Aker graduated from the University of Tennessee College of Medicine in 1935. During the early years of his practice he served 10 Eastern Kentucky counties including the coalfields of Perry County.

GEORGE H. GREGORY, M.D.
Versailles
1896-1968

George H. Gregory, M.D., 72, a Versailles physician since 1929, died October 7 at Central Baptist Hospital, Lexington, after a long illness. Doctor Gregory graduated from the Cincinnati School of Medicine in 1928. He served as physician for Margaret Hall School and the Woodford County Selective Service Board and was first chairman of the Woodford County Board of Health.

ANNUAL CLINICAL CONFERENCE

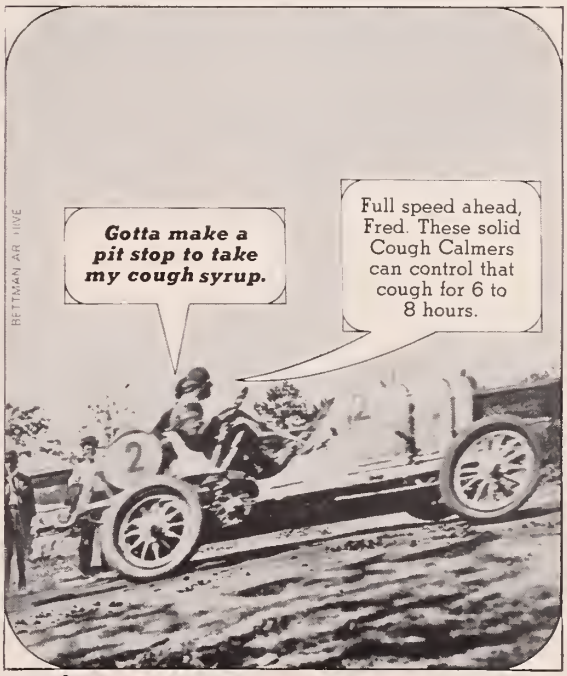
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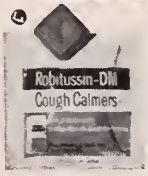
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GARFIELD HOWARD, M.D.
Crab Orchard
1884-1968

Garfield Howard, M.D., 85, a retired physician, died October 21 at a Danville nursing home. Doctor Howard graduated from the Louisville Hospital College of Medicine in 1907. He practiced in Gatliff for 38 years and then at the Veterans Hospital in Louisville until his retirement in 1968.

CHARLES H. McCHORD, M.D.
Lexington
1884-1968

Charles H. McChord, M.D., 84, a retired physician, died October 18 at Good Samaritan Hospital, Lexington. Doctor McChord graduated from the University of Louisville School of Medicine in 1910. He was an associate staff member at the University of Kentucky College of Medicine and a member of several medical organizations.

WILLIAM E. RENDER, M.D.
Louisville
1875-1968

William E. Render, M.D., 93, a pioneer Louisville psychiatrist, died November 9 at Kentucky Baptist Hospital. A 1902 graduate of the University of Louisville School of Medicine (then known as the Hospital College of Medicine), Doctor Render was a former partner in the Louisville Neuropathic Sanitorium. He was a member of the Kentucky and American Psychiatric Associations.

A. D. SLONE, M.D.
Paintsville
1907-1968

A. D. Slone, M.D., 61, a Paintsville physician for many years, died September 10 in St. Mary's Hospital, Huntington, following a brief illness. Doctor Slone was a member of the Johnson County Medical Association and the Paintsville Kiwanis Club.

E. P. WRIGHT, M.D.
Pikeville
1912-1968

E. P. Wright, M.D., 56, a Pikeville ophthalmologist, died October 9 at his home. Death was attributed to a heart attack. Doctor Wright graduated from the University of Louisville School of Medicine in 1935 and had practiced in Pikeville for many years.

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Warning: If coumarin-type anticoagulants are given simultaneously, watch for excessive increase in prothrombin time. Instances of severe bleeding have occurred. Persistent or severe dyspepsia may indicate peptic ulcer; perform upper gastrointestinal x-ray diagnostic tests if drug is continued. Pyrazole compounds may potentiate the pharmacologic action of sulfonylurea, sulfonamide-type agents and insulin. Carefully observe patients receiving such therapy. Use with caution in the first trimester of pregnancy and in patients with thyroid disease.

Precautions: Before prescribing, carefully select patients, avoiding those responsive to routine measures as well as contraindicated patients. Obtain a detailed history and a complete physical and laboratory examination, including a blood count. Patients should not exceed recommended dosage, should be closely supervised and should be warned to discontinue the drug and report immediately if fever, sore throat, or mouth lesions (symptoms of blood dyscrasia); sudden weight gain (water retention); skin reactions; black or tarry stools or other evidence of intestinal hemorrhage occur. Make complete blood counts at weekly intervals during early therapy and at 2-week intervals thereafter. Discontinue the drug immediately and institute countermeasures if the white count changes significantly, granulocytes decrease, or immature forms appear. Use greater care in the elderly and in hypertensives.

Adverse Reactions: The more common are nausea and edema. Swelling of the ankles or face may be minimized by withholding dietary salt, reduction in dosage or use of diuretics. In elderly patients and in those with hypertension the drug should be discontinued with the appearance of edema. The drug has been associated with peptic ulcer and may reactivate a latent peptic ulcer. The patient should be instructed to take doses immediately before or after meals or with milk to minimize gastric upset. Drug rash occasionally occurs. If it does, promptly discontinue the drug. Agranulocytosis, exfoliative dermatitis, Stevens-Johnson syndrome, Lyell's syndrome (toxic necrotizing epidermolysis), or a generalized allergic reaction similar to serum sickness may occur and require permanent withdrawal of medication. Agranulocytosis can occur suddenly in spite of regular, repeated normal white counts. Stomatitis, salivary gland enlargement, vomiting, vertigo and languor may occur. Leukemia and leukemoid reactions have been reported. While not definitely attributable to the drug, a causal relationship cannot be excluded. Thrombocytopenic purpura and aplastic anemia may occur. Confusional states, agitation, headache, blurred vision, optic neuritis and transient hearing loss have been reported, as have hyperglycemia, hepatitis, jaundice, hypersensitivity angiitis, pericarditis and several cases of anuria and hematuria. With long-term use, reversible thyroid hyperplasia may occur infrequently. Moderate lowering of the red cell count due to hemodilution may occur.



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Contraindications: Hypersensitivity to any component.

Warning: In renal impairment, since liver toxicity is possible, lower doses are indicated; during prolonged therapy consider serum level determinations. Photodynamic reaction to sunlight may occur in hypersensitive persons. Photosensitive individuals should avoid exposure; discontinue treatment if skin discomfort occurs.

Precautions: Drowsiness, anorexia, slight gastric distress can occur. In excessive drowsiness, consider longer dosage intervals. Persons on full dosage should not operate vehicles. Nonsusceptible organisms may overgrow; treat superinfection appropriately. Treat beta-hemolytic streptococcal infections at least 10 days to help prevent rheumatic fever or acute glomerulonephritis. Tetracycline may form a stable calcium complex in bone-forming tissue and may cause dental staining during tooth development (last half of pregnancy, neonatal period, infancy, early childhood).

Adverse Reactions: *Gastrointestinal*—anorexia, nausea, vomiting, diarrhea, stomatitis, glossitis, enterocolitis, pruritus ani. *Skin*—maculopapular and erythematous rashes; exfoliative dermatitis; photosensitivity; onycholysis, nail discoloration. *Kidney*—dose-related rise in BUN. *Hypersensitivity* reactions—urticaria, angioneurotic edema, anaphylaxis. *Intracranial*—bulging fontanels in young infants. *Teeth*—yellow-brown staining; enamel hypoplasia. *Blood*—anemia, thrombocytopenic purpura, neutropenia, eosinophilia. *Liver*—cholestasis at high dosage.

Upon adverse reaction, stop medication and treat appropriately.

Lederle

350-8

(Continued from page 1061)

and expense to obtain these translations for our own use, we have been encouraged to make these papers available to workers the world over.

The papers will appear in five volumes. The initial collection, Volume I, dedicated as a Memorial to Ivor Dunsford, contains eight titles covering the A-B-O system. Volume II, contains nine papers, covers the secretion of blood group specific substances and the Lewis system. Volume III contains four papers dealing with the MN and P systems and a monograph by Ludwig Hirszfeld. Volume IV contains six papers and a monograph by Fritz Schiff covering anthropologic and other applications of blood grouping data. Volume V, scheduled for release in 1968, will commemorate the centennial of the birth of Karl Landsteiner. Six of the seven papers in this volume are by Landsteiner and deal with basic concepts in immunology.

It is hoped that the series of papers will stimulate established workers in the field of immunohematology and provide newcomers to this area a sound indoctrination in this exciting discipline.

References

1. Mann, J. D., A. Cahan, A. S. Gelb, N. Fisher, J. Hamper, P. Tippett, R. Sanger, and R. R. Race. A sex-linked blood group. *Lancet 1:* 8, 1962.
2. Grubb, R. Agglutination of erythrocytes coated with "incomplete" anti-Rh by certain rheumatoid arthritic sera and some other sera. The existence of human serum groups. *Acta. Path. Microb. Scand. 39:* 195, 1956.
3. Ropartz, C., J. Lenoir, and L. Rivat. A new inheritable property of human sera: the Inv factor. *Nature, 189:* 586, 1961.
4. Steinberg, A. G. *Genetic Variations in Human Immunoglobulins. Advances in Immunogenetics,* Lippincott, Philadelphia, Chapter 3, pp. 75-98, 1967.
5. Polonovski, M. and M. J. Jayle. Existence dans la plasma sanguin d'une substance activant l'action peroxydasique de l'hemoglobin. *C. R. Soc. Biol. 129:* 457, 1938.
6. Laurell, C. B., and M. Nyman. Studies on the serum haptoglobin level in hemoglobinemia and its influence on renal excretion of hemoglobin. *Blood, 12:* 493, 1957.
7. Laurell, C. B., and B. Ingelman. The iron-binding protein of swine serum. *Acta. Chem. Scand. 1:* 770, 1947.
8. Giblett, E. R. Variant Phenotypes: Haptoglobin, Transferrin, and Red Cell Enzymes. *Advances in Immunogenetics,* Lippincott, Philadelphia, Chapter 4, pp. 99-132, 1967.
9. Harboe, M. and J. Lundevall. The application of the Gm system in Paternity cases. *Vox Sang. 6:* 257-273, 1961.

Governor Appoints Dr. Weldon

Governor Louie B. Nunn recently announced the appointment of Tom Weldon, M.D., Covington, to a four-year-term on the Advisory Council on Mental Health. Doctor Weldon replaces Frank Gaines, M.D., Louisville, whose term has expired.

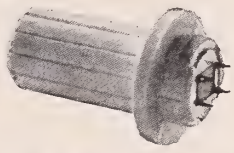
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NEWS ITEMS

John N. Hafner, M.D., an ophthalmologist, is practicing in Louisville in association with Roger D. Salot, M.D. Doctor Hafner graduated from the University of Louisville School of Medicine in 1961 and completed his internship and residency training at Louisville General Hospital.

Walter R. Brewer, M.D., a urologist, is associated with Robert Kinnaird, M.D., in Lexington. A 1963 graduate of Wayne State University, Doctor Brewer completed his residency training at the Medical College of Virginia.

Paul Price, M.D., an obstetrician, is associated with Doctors Priddle, Bohle and Blair in Paducah. A 1964 graduate of West Virginia University Medical School, Doctor Price completed his internship and residency training in University of Chicago hospitals.

Gilbert O. Harris, M.D., a general practitioner, is associated with the Fuller-Morgan Clinic in Mayfield. Doctor Harris graduated from Tulane Medical School in 1967 and completed his internship at McLeod Infirmary, Florence, S.C.

Theodore Lawwill, M.D., an ophthalmologist, is now an assistant professor of ophthalmology at the University of Louisville School of Medicine. Doctor Lawwill graduated from Vanderbilt University Medical School in 1961 and completed his residency training at the University of Illinois Medical School.

Robert P. Goodman, M.D., an orthopaedic surgeon, is practicing in association with W. K. Massie, M.D., and David B. Stevens, M.D., in Lexington. A 1963 graduate of Vanderbilt University Medical School, Doctor Goodman completed his internship and residency training at Duke University and the Campbell Clinic, Memphis, Tenn.

Robert H. Shipp, M.D., a general practitioner, is associated with C. V. Dodson, M.D. in Russellville. A 1958 graduate of the University of Tennessee School of Medicine, Doctor Shipp has practiced in Shelbyville and in Kingsport, Tenn.

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Jules J. McNerney, M.D., an internist is now director of the Hopkinsville Area Office of the Regional Medical Program. A 1942 graduate of Louisiana State University School of Medicine, Doctor McNerney served in the U.S. Medical Corps for 25 years.

William P. McElwain, M.D. is now associate director of the Fayette County Health Department in Lexington. Doctor McElwain graduated from the University of Louisville School of Medicine in 1958. He served as a medical director in the Division of Indian Health, U.S. Public Health Service, for seven years.

Cornelia B. Wilbur, M.D., a psychiatrist, is now associated with the University of Kentucky College of Medicine. Doctor Wilburn has served as a clinical professor of psychiatry at West Virginia University and as superintendent of Weston State Hospital, Weston, W. Va.

Arthur Leslie Robertshaw, M.D, a psychiatrist is now on the staff of the Community Mental Health Center of Western Kentucky at Paducah. Doctor Robertshaw was formerly senior psychiatrist in charge of admission wards at the Veterans Administration Hospital, Lexington.

Jack L. Hamman, M.D., is now associated with the Trover Clinic in Madisonville, limiting his practice to thoracic, vascular and general surgery. Doctor Hamman, a 1957 graduate of the University of Tennessee School of Medicine, practiced previously in Kingsport, Tenn. and Roanoke, Va.

Joaquin P. Baralt, M.D., is now a staff physician specializing in endocrinology at Kentucky State Hospital, Danville. Doctor Baralt graduated from Havana, Cuba Medical School in 1960. He completed his internship and residency training at the Cooperativa Medica De Dependientes in 1965.

Augustin Sierra, M.D., an orthopaedic surgeon, is practicing in association with the Henderson Clinic. A 1960 graduate of Javeriana Medical School, Bogota, Colombia, Doctor Sierra completed his internship at Prince George's Hospital, Cheverly, Md., and his residency training at Temple Unversity, Philadelphia, Pa.

W. G. Begley, M.D. has opened an office in Bowling Green, limiting his practice to otorhinolaryngology. Doctor Begley graduated from the University of Louisville School of Medicine in 1961. He interned at Portsmouth Naval Hospital and completed his residency training in University of Louisville Hospitals. He recently completed four years of service in the U.S. Navy Medical Corps.

Robert M. Senese, M.D., a pediatrician, is practicing in Louisville in association with Henry DeLong, M.D. Doctor Senese graduated from Indiana University Medical School in 1963 and completed his internship and residency training in Louisville hospitals.

1968 CONSTITUTION AND BYLAWS

OF THE

KENTUCKY MEDICAL ASSOCIATION

Revised September 25, 1968

CONSTITUTION

Article I. Name of the Association
Article II. Purpose of the Association
Article III. Component Societies
Article IV. Composition and Meetings of the Association
Article V. Officers
Article VI. House of Delegates
Article VII. Districts, Sections and District Societies
Article VIII. Board of Trustees
Article IX. Funds and Expenses
Article X. Referendum
Article XI. The Seal
Article XII. Amendments
Article XIII. Definitions

Article I. Name of Association

The name and title of this organization shall be the Kentucky Medical Association.

Article II. Purpose of the Association

The purpose of the Association shall be to federate and bring into compact organization the entire medical profession of the State of Kentucky and to unite with similar associations in other states to form the American Medical Association, with a view to the extension of medical knowledge; the advancement of medical science and charity; the evaluation of the standards of medical education; the enactment and enforcement of just medical laws; the promotion of friendly intercourse among physicians and the guarding and fostering of their material interests; the protection of the members thereof against unjust assaults upon their professional care, skill or integrity; and to the enlightenment and direction of public opinion in regard to the great problems of state medicine so that the profession shall become more capable and honorable within itself and more useful to the public in the prevention and cure of disease and in prolonging and adding comfort to life.

Article III. Component Societies

Component societies shall consist of those medical societies which hold charters from this Association.

Article IV. Composition and Meetings of the Association

The Association shall consist of the members of the component societies but the House of Delegates shall have authority to adopt such bylaws regulating the admission and classification of members as it may deem advisable. The Association shall hold an Annual Meeting and such Special Meetings as may be called pursuant to the bylaws.

Article V. Officers

Section 1. The officers of this Association shall be a President, a President-elect, a Vice President, a Secretary, a Treasurer, a Speaker and Vice Speaker of the House of Delegates, a Trustee and an Alternate Trustee from each district that may be established; and such other officers as may be provided for in the Bylaws.

Section 2. The eligibility, duties and terms of office of all officers of the Association shall be as prescribed in the Bylaws.

Section 3. All officers shall serve until their successors have been elected and installed.

Section 4. All officers shall be elected by the House of Delegates at its Regular Session and shall take office on the last day of the Annual Meeting.

Article VI. House of Delegates

Section 1. The House of Delegates shall be the legislative body of the Association and shall have power, by a two-thirds vote of all the delegates present at that session, to adopt bylaws to carry out the provisions of this Constitution and to provide for the government of the Association in any other manner not inconsistent with this Constitution. It shall meet in Regular Session annually during the Annual Meeting of the Association, and may be called into Special Session under such conditions as may be prescribed in the bylaws.

Section 2. Delegates shall be members of and elected by component societies in such manner as may be provided in the bylaws. Officers of the Association, Delegates and Alternate Delegates to the American Medical Association, and the five immediate Past Presidents shall be ex officio members of the House of Delegates and entitled to vote.

Section 3. The House of Delegates shall elect a Speaker and a Vice-Speaker, one of whom shall preside during the meetings of the House of Delegates. The presiding officer shall not be entitled to a vote except in the event of a tie.

Section 4. The House of Delegates shall be the final judge as to the qualification of its members.

Article VII. Districts, Sections and District Societies

The House of Delegates shall divide the state into Districts composed of one or more counties, for administrative purposes. It may also provide for a division of the scientific work of the Association into appropriate Sections, and for the organization of such District Societies, composed exclusively of members of component societies, as will promote the best interests of the profession.

Article VIII. Board of Trustees

The House of Delegates shall make provision in the bylaws for a Board of Trustees composed of one Trustee from each District and such of the other officers of the Association as the House may deem appropriate, which shall be charged with the general direction of the Association's affairs during the interim between meetings of the House. The House may delegate such powers to the Board of Trustees as are not specifically required by this Constitution to be exercised by the House, and may limit the Board's powers to such extent as it may determine to be necessary or desirable. Provided, however, that in no event shall the Board of Trustees have power to commit the Association to any course of action which is contrary to or at variance with any policy established by the House of Delegates.

Article IX. Funds and Expenses

The House of Delegates shall provide funds for meeting the expenses of the Association by such methods and from such sources as it may select, including but not limited to an equal per capita assessment by class of membership, upon each component county society. Funds may be appropriated by the House of Delegates to defray the expenses of the annual session, for publications and for such other purposes as will promote the welfare of the Association and the profession.

Article X. Referendum

The membership of the Association, by written petition signed by not less than 10% of the active membership, may obtain a referendum on any question pending before the House of Delegates. The Secretary, upon the presentation of such a petition to him shall cause the question to be submitted to the active membership by mail, and if a majority of the active members shall signify its approval or disapproval of a certain policy or course of action with respect to the question thus submitted, the will of the majority shall determine the question and shall be binding upon the House of Delegates and the Association upon certification of the result of the vote by the Secretary to the President and Board of Trustees.

Article XI. The Seal

The Association shall have a common Seal with power to break, change or renew the same at pleasure.

Article XII. Amendments

The House of Delegates may amend any article of this Constitution by a two-thirds vote of the delegates registered at the Regular Session, provided that such amendment shall have been presented in open meeting at the previous regular session, and that it shall have been sent officially to each component county society at least two months before the session at which final action is to be taken.

Article XIII. Definitions

Whenever used in this Constitution, the Articles of Incorporation or the Bylaws—

(a) "County society," "component county society," or "component medical society" means "component society."

(b) "Annual Meeting" means the annual three-day meeting of the Association.

(c) "Scientific Sessions" mean those sessions during the Annual Meeting at which scientific subjects are programmed and discussed.

(d) "Regular Session" means the regular session of the House of Delegates which is held during the Annual Meeting.

(e) "Special Session" means a special, called meeting or session of the House of Delegates.

BYLAWS

Chapter I. Membership
Chapter II. Annual and Special Meetings of the Association
Chapter III. The House of Delegates
Chapter IV. Election of Officers
Chapter V. Duties of Officers
Chapter VI. Board of Trustees
Chapter VII. Discipline—The Judicial Council
Chapter VIII. Standing Committees and Councils
Chapter IX. Assessments and Expenditures
Chapter X. Rules of Conduct
Chapter XI. Rules of Order
Chapter XII. County Societies
Chapter XIII. Amendments

CHAPTER I. MEMBERSHIP

Section 1. Membership in this Association shall be coterminous with membership in a component county society. No physician shall be eligible for membership in this Association unless he is a member, in good standing of a component society, nor may he maintain membership in a component county society unless he is a member, in good standing of this Association.

When a physician who meets the qualifications hereinafter set forth, is certified to the Secretary as a member in good standing of a component society, properly classified as to type of membership, and when the dues pertaining to his membership classification have been received by the Secretary of the Association, the name of the member shall be included in the official roster of the Association and he shall be entitled to all the privileges of his class of membership. Provided, however, that members in good standing from other state societies may, if admitted to membership by a component society, be accepted by KMA for membership without paying dues for the remainder of the calendar year in which the transfer is made. Provided further, that the Board of Trustees shall have power, upon written application, approved annually by the county society of which the applicant is a member, to excuse any member from the payment of dues because of financial hardship.

Section 2. Membership in the Association shall be divided into eight classes, to-wit: Active, Emeritus, Associate, Inactive, Student, Service, Honorary and Special.

(a) Active Members. The active membership of the Association shall consist of the active members of the various component county medical societies. To be eligible for active membership in any component county society, the applicant must be a doctor of medicine of good moral, ethical, and professional standing, who is licensed to practice medicine in Kentucky.

(b) Emeritus Members. Component societies may elect as a member-emeritus any doctor of medicine who is 70 years of age or who has retired from active practice and who has previously maintained active membership in good standing in his own society for twenty years or more. Emeritus members shall have the right to vote but shall not pay dues, hold office or be entitled to the benefits of Chapter VI, Section 9 of these Bylaws. They shall receive the Journal and other publications of the Association.

(c) Associate Members. The associate membership of the Association shall consist of the associate members of the various component county medical societies. To be eligible for associate membership in any component county society, the applicant must be ineligible for active membership and qualify under one or more of the following groups:

(1) Medical officers of the United States Army, Navy, Air Force, Veterans Administration, Public Health Service, or other governmental service while on duty in the State.
(2) Interns, residents or teaching fellows who are doctors of medicine and who have complied with all pertinent regulations of the State Board of Health.
(3) Osteopathic physicians who practice allopathic medicine.

Associate members shall not have the right to vote nor to hold office, but shall receive the Journal and other publications of the Association.

(d) Inactive Members. The inactive membership of the Association shall consist of the inactive mem-

bers of the various component county societies. Any doctor of medicine licensed to practice medicine in Kentucky who is not engaged in the practice of medicine but who is otherwise eligible for active membership in the Association may be admitted to inactive membership by any component county society. Inactive members shall not have the right to vote nor hold office, but shall receive the Journal and other publications of the Association.

(e) Student Members. Any student in an accredited medical school in Kentucky or any resident of Kentucky who is a student in any accredited medical school in the United States shall be eligible for student membership. Student members shall not have the right to vote nor hold office. They may apply directly to the State Association for membership and be assigned to the county society of their choice. The membership year for student members shall run from September 1 to August 31 of each year.

(f) Service Members. Members of the Association in good standing who enter military service and are ineligible for Associate membership shall be classified as service members. Service Members shall not be required to pay dues. If a member in good standing enters service prior to April 1 and has paid his dues for that year, he shall receive all publications and other benefits applicable to his class of membership in the Association and shall owe no further dues until January 1 following his release. If a member in good standing enters service prior to April 1 without paying his dues for that year, he shall receive publications and other benefits but shall owe the dues applicable to his class of membership immediately following his release from active duty. Members whose dues have not been received by April 1 are not in good standing.

(g) Honorary Members. Any physician possessed of scientific attainments who is a member of a constituent state medical association and who has participated in the program of the scientific session and who is not a citizen of Kentucky may by unanimous vote of the House of Delegates be elected to honorary membership. Honorary members shall be entitled to the privileges of the floor in all scientific sessions.

(h) Special Members. Component societies may invite dentists, pharmacists, funeral directors, or other professional persons to become special members. Special members shall have no rights or obligations under these Bylaws, but may be accorded the privilege of attending and participating in the scientific meetings of the society, provided, however, that a registration fee may be required of special members who desire to attend the Annual Meeting of the Association.

Section 3. Guests of Honor. Any distinguished physician not a resident of this State may become a guest of honor during any Annual Meeting upon invitation of the Board of Trustees and shall be accorded the privilege of participating in all of the scientific work of that meeting.

Section 4. No person who is finally convicted of a felony subsequent to September 26, 1968, shall be eligible for membership in this Association unless and until, upon proper application to the Judicial Council, it is determined that he is morally and ethically qualified. Except as provided in Chapter VII, Section 4 of these Bylaws, no person who is under sentence of suspension or expulsion from any component society of this Association shall be entitled to any of the rights or benefits of membership of this Association.

Section 5. Every new active member shall be required to attend and successfully complete an orientation course to be presented at stated intervals by the Board of Trustees or one of its committees. The form and content of this course shall be prescribed by the Board and unless excused by the Board for good cause shown, failure to attend and successfully complete the course within two years after the member is first admitted to active membership shall automatically revoke the delinquent's membership and terminate all of his rights and privileges as a member, and he shall thereafter, for a period of one year, be ineligible for membership in any component society, and shall not after one year be admitted to membership unless and until he has successfully completed the required orientation course.

CHAPTER II. ANNUAL AND SPECIAL MEETINGS OF THE ASSOCIATION

Section 1. The Association shall hold its annual and special meetings at such times and places as may be determined by the House of Delegates.

Section 2. The Annual Meeting shall consist of one or more scientific sessions, at least two meetings of the House of Delegates, and such other gatherings as may be authorized by the Board of Trustees. Each scientific session shall be presided over by the President or in his absence or disability or at his request by the President-Elect or one of the vice presidents. The entire time of the scientific sessions, as far as may be, shall be devoted to papers and discussions related to scientific medicine.

Section 3. The name of a physician upon the properly certified roster of members or list of delegates of a component society which has paid its annual assessment, shall be prima facie evidence of his right to register at any meeting of this Association.

Section 4. Each member in attendance at any meeting shall enter his name on the registration book indicating the component society of which he is a member. When his right to membership has been verified by reference to the roster of the society, he shall receive a badge which shall be evidence of his right to all the privileges of membership at that meeting. No member or delegate shall take part in any of the proceedings of any meeting until he has complied with the provisions of this section.

CHAPTER III. THE HOUSE OF DELEGATES

Section 1. The House of Delegates shall meet in Regular Session at the time and place of the Annual Meeting, and shall, insofar as is practicable, fix its hours of meeting so as to give delegates an opportunity to attend the scientific sessions and other proceedings. Provided, however, that if the business interests of the Association and profession require, the Speaker, with the consent of the Board of Trustees, may convene the Regular Session in advance of the Annual Meeting, and the House may remain in session after the final adjournment thereof.

Section 2. The House may be called into Special Session by the President with the approval of the Board of Trustees, and a special session shall be called by the President on the written request of delegates representing fifty or more component societies. The purpose of all special sessions shall be stated in the call, and all business transacted at any such special session shall be germane to the stated purpose.

Section 3. When a special session is called, the Secretary shall mail a notice of the time, place, and purpose of such meeting to the last known address of each delegate at least ten days before such session.

Section 4. The Speaker shall, by virtue of his office, be responsible for making all arrangements for all sessions, regular or special, of the House.

Section 5. The members of the House of Delegates shall be elected by the various component societies

in the manner prescribed in Chapter XII of these Bylaws.

Section 6. In the event a component society is not represented at any meeting of the House, the Speaker shall consult with any officer of the component society who is in attendance and, with the approval of the Credentials Committee, may appoint any active member of such component society who is in attendance, as its alternate delegate. If no officer of such society is present, the Speaker may make the appointment without consultation, but with the approval of the Credentials Committee. All such appointments shall also be subject to the approval of the House.

Section 7. Forty per cent of the qualified delegates, as defined by Article VI of the Constitution, shall constitute a quorum and all of the meetings of the House shall be open to the members of the Association. The House shall have the right to go into executive session whenever in its judgment such action is indicated; except that active members of the Association shall have the right to attend all executive sessions.

Section 8. Each resolution introduced into the House shall be in writing and signed by the author and presented to the Secretary following its introduction. If the author be an individual member, it shall be signed by him. If the author be a group of members, it shall be signed by the authorized spokesman for that group. Immediately after the Delegate has introduced the Resolution, it shall be referred to the proper Reference Committee before action thereon is taken.

Section 9. No resolution shall be introduced in the first meeting of the House of Delegates by any member or group of members other than the Board of Trustees unless a copy thereof was furnished to the Headquarters Office at least seven days prior to its introduction. The only exception to this shall be that a resolution which has been signed by ten or more members of the House of Delegates and of which there are sufficient printed copies to distribute to each member of the House of Delegates may be received for consideration by an affirmative vote of three-fourths of the members present and voting. No new business shall be introduced in the last meeting of the House without unanimous consent, except when presented by the Board of Trustees. All new business so presented shall require the affirmative vote of three-fourths of those delegates present and voting, for adoption.

Section 10. The House shall give diligent attention to and foster the scientific work and spirit of the Association, and shall constantly study and strive to make each Annual Meeting a stepping stone to further ones of higher interest.

Section 11. It shall consider and advise as to the material interests of the profession, and of the public in those important matters wherein the public is dependent upon the profession, and shall use its influence to secure and enforce all proper medical and public health legislation, and to diffuse information in relation thereto.

Section 12. It shall make careful inquiry into the condition of the profession of each county in the State, and shall have authority to adopt such methods as may be deemed most efficient for building up and increasing the interest in such county societies as already exist and for organizing the profession in counties where societies do not exist. It shall especially and systematically endeavor to promote friendly intercourse between physicians of the same locality and shall continue these efforts until every physician in every county of the State who will agree to abide by the constitution, bylaws and other rules and regulations of the Association and the appropriate component society, has been brought under medical society influence.

Section 13. It shall encourage postgraduate work in medical centers as well as home study and research and shall endeavor to have the results of the same utilized and intelligently discussed in the county societies.

Section 14. It shall elect representatives to the House of Delegates of the American Medical Association in accordance with the Constitution and Bylaws of that body.

Section 15. It shall, upon application, provide and issue charters to county societies organized in conformity with the Constitution and Bylaws of this Association.

Section 16. The state shall be divided into the following districts:

No. 1—Ballard, Calloway, Carlisle, Fulton, Graves, Hickman, Livingston, McCracken, and Marshall.

No. 2—Daviess, Hancock, Henderson, McLean, Ohio, Union, and Webster.

No. 3—Caldwell, Christian, Crittenden, Hopkins, Lyon, Muhlenberg, Todd, and Trigg.

No. 4—Breckinridge, Bullitt, Grayson, Green, Hardin, Hart, Larue, Marion, Meade, Nelson, Taylor, and Washington.

No. 5—Jefferson.

No. 6—Adair, Allen, Barren, Butler, Cumberland, Edmonson, Logan, Metcalf, Monroe, Simpson, and Warren.

No. 7—Anderson, Carroll, Franklin, Gallatin, Grant, Henry, Oldham, Owen, Shelby, Spencer, and Trimble.

No. 8—Boone, Campbell, and Kenton.

No. 9—Bath, Bourbon, Bracken, Fleming, Harrison, Mason, Nicholas, Pendleton, Scott, and Robertson.

No. 10—Fayette, Jessamine, and Woodford.

No. 11—Clark, Estill, Jackson, Lee, Madison, Menifee, Montgomery, Owsley, Powell, and Wolfe.

No. 12—Boyle, Casey, Clinton, Garrard, Lincoln, McCreary, Mercer, Pulaski, Rockcastle, Russell, and Wayne.

No. 13—Boyd, Carter, Elliott, Greenup, Lawrence, Lewis, Morgan, and Rowan.

No. 14—Breathitt, Floyd, Johnson, Knott, Letcher, Magoffin, Martin, Perry, and Pike.

No. 15—Bell, Clay, Harlan, Knox, Laurels, Leslie, and Whitley.

District meetings may be held as desired, and District Medical Associations may be organized as desired, according to the districts outlined above.

Section 17. It shall have authority to appoint committees for special purposes from among members of the Association who are not members of the House of Delegates and such committees may report to the House of Delegates in person, and may participate in the debate thereon.

Section 18. Except as provided in Chapter VI, Section 4, it shall approve all memorials and resolutions issued in the name of the Association before the same shall become effective.

Section 19. A digest of proceedings of the House of Delegates shall be published in the Journal of the Association.

CHAPTER IV. ELECTION OF OFFICERS AND DELEGATES TO THE AMERICAN MEDICAL ASSOCIATION

Section 1. The President-Elect and the Vice President shall be elected for a term of one year, the President-Elect succeeding to the presidency at the expiration of his term as President-Elect. The Vice President shall be elected from the same general area

in which the president resides. Delegates to the AMA and their alternates shall be elected for terms of two years. The Speaker of the House of Delegates, the Vice Speaker, the Secretary, and the Treasurer shall be elected for terms of three years, but no member shall be eligible for election to more than two consecutive full terms as Secretary or Treasurer. Trustees and their Alternates shall be elected for terms of three years and Trustees shall be limited to serving for not more than two consecutive full terms. The terms of the Trustees and their Alternates shall coincide and be so arranged that one-third of the terms expire each year, insofar as possible, provided, however, that nothing contained herein shall preclude an Alternate Trustee from serving two full terms as a Trustee. No member shall be eligible for the office of President, President-Elect, Vice President, Speaker or Vice Speaker of the House of Delegates, Trustee or Alternate Trustee who has not been an active member of the Association for at least five years.

Section 2. During the last meeting of the regular session of the House of Delegates, the Speaker of the House of Delegates shall submit to the members of the House of Delegates a list of ten names from which, by ballot, the House of Delegates shall select five members to serve as the Nominating Committee for the next year. The five names receiving the most votes shall form the committee. The committee shall select one of its members as chairman at an organization meeting held during the Interim Meeting, or at some other appropriate place designated by the Board of Trustees at least four months before the Annual Meeting. The committee, in addition to such other meetings as it may choose to hold, shall schedule an open meeting immediately after the close of the first meeting of the House at each Annual Meeting. This open meeting shall be held in the meeting place of the House of Delegates, shall receive broad publicity, and those who have business to discuss with the committee shall have a hearing. Before noon of the following day, the committee shall post a bulletin board near the entrance to the hall in which the Annual Meeting is being held, its nominations for each office to be filled, and shall formally present said nominations to the House at the time of the election. Additional nominations may be made from the floor by submitting the nominations without discussion or comment. Vacancies occurring on the Nominating Committee by virtue of death, resignation, or disability, shall be filled by appointment of the Speaker.

Section 3. The election of officers and delegates to the AMA and their alternates shall be held at the second meeting of the regular session of the House of Delegates.

Section 4. All elections shall be by secret ballot, and a majority of the votes cast shall be necessary to elect. Provided, however, that when there are more than two nominees, the nominee receiving the least number of votes on the first ballot shall be dropped and the balloting shall continue in like manner until an election occurs.

Section 5. Any member known to have directly or indirectly solicited votes for, or sought any office within the gift of the Association shall be ineligible for any office for two years.

Section 6. The Delegates representing the counties in each District form the Nominating Committee for the purpose of nominating a Trustee and an Alternate Trustee for the District concerned. This committee shall hold a well-publicized meeting open to all active members of the District concerned who are in attendance at the Annual Meeting for the purpose of discussing the nomination of the Trustee and his Alternate to serve the District. Additional nominations may be made from the floor when the Nominating Committee makes its report to the House of Delegates.

CHAPTER V. DUTIES OF OFFICERS

Section 1. Except as provided in Chapter II, Section 2 hereof, the President shall preside at all scientific sessions of the Association and shall appoint all committees not otherwise provided for. He shall deliver an annual address at such time as may be arranged and shall perform such duties as custom and parliamentary usage may require. He shall be the real head of the profession in the State during his term of office and so far as practicable, shall visit by appointment, the various sections of the State and assist the Trustees in building up the county societies and in making their work more practical and useful. He shall be reimbursed for his reasonable and necessary travel expense incurred in the performance of his duties as President, in an amount not to exceed the total amount appropriated for that purpose in the annual budget.

Section 2. The President-Elect shall assist the President in visitation of county and other meetings. He shall become president of the Association at the next Annual Meeting following his election as president-elect. In the event of his death or resignation, or if he becomes permanently disqualified or disabled, his successor shall be elected by the House of Delegates and shall be installed as President of the Association at its next regular session.

Section 3. The Vice President shall assist the President in the discharge of his duties, and shall perform such other duties as may be prescribed by the Board of Trustees. In the event of a vacancy in the office of the President, the Vice President shall succeed to the office of the President.

Section 4. The President-Elect and the Vice President, when acting for and in behalf of the President, may be reimbursed for their reasonable and necessary travel expenses incurred in the performance of their duties, in such amounts as may be available out of the sum appropriated in the annual budget for traveling expenses of the President.

Section 5. The Speaker of the House shall preside at all meetings of the House of Delegates. He shall appoint all committees of the House of Delegates with the approval of the House of Delegates. He shall be a non-voting member of said committees, and shall perform such other duties as custom and parliamentary usage may require.

Section 6. The Vice Speaker shall assume the duties of the Speaker in his absence, and shall assist the Speaker in the performance of his duties. In the event of the death, disability, resignation, or removal of the Speaker, the Vice Speaker shall automatically become Speaker of the House of Delegates.

Section 7. The Secretary shall advise the Executive Secretary in all secretarial matters of this Association and shall act as the corporate secretary insofar as the execution of official documents or institution of official actions are required. He shall perform such duties as are placed upon him by the Constitution and Bylaws, and in the event of the death, resignation or removal of the Executive Secretary, shall assume the duties of that office until the vacancy is filled.

Section 8. The Treasurer shall demand and receive all funds due the Association, including bequests and donations. He shall, if so directed by the House of Delegates, sell or lease any real estate belonging to the Association and execute the necessary papers and shall, subject to such direction, have the care and management of the fiscal affairs of the Association. All vouchers of the Association shall be signed by the Secretary or the Executive Secretary and shall be countersigned by the Treasurer of the Association. Under unusual circumstances, when one or more of the above-named officials are not readily available, the

President or the Chairman of the Board of Trustees is authorized to sign the vouchers, provided that in any event all vouchers of the Association shall bear a signature and a counter-signature. All five officials shall be required to give bond in an amount to be determined by the Board of Trustees. The Treasurer shall report the operations of his office annually to the House of Delegates, via the Board of Trustees, and shall truly and accurately account for all funds belonging to the Association and coming into his hands during the year. His accounts shall be audited annually by a certified public accountant appointed by the Board of Trustees.

CHAPTER VI. BOARD OF TRUSTEES

Section 1. The Board of Trustees shall be the executive body of the House of Delegates and between sessions of the House of Delegates shall exercise the powers conferred upon the House of Delegates by the Constitution and Bylaws. The Board of Trustees shall consist of the duly elected Trustees and the President, the President-Elect, the Vice-President, the immediate Past-President, the Speaker, and Vice-Speaker of the House of Delegates, the Secretary, the Treasurer, and the Delegates to the American Medical Association. The Executive Committee of the Board of Trustees shall consist of the President, the President-Elect, the Secretary, the Chairman of the Board of Trustees, the Vice Chairman of the Board of Trustees, and two Trustees to be elected annually by the Board of Trustees. A majority of the full Board, to-wit, 14, and a majority of the full Executive Committee, to-wit, 4, shall constitute a quorum for the transaction of all business by either body. Between sessions of the Board, the Executive Committee shall exercise all of the powers belonging to the Board except those powers specifically reserved by the Board to itself.

Section 2. The Board shall meet daily, or as required, during the Annual Meeting of the Association and at such other times as necessity may require, subject to the call of the Chairman or on petition of three Trustees. It shall meet on the last day of the Annual Meeting for reorganization and for the outlining of the work for the ensuing year. It shall, through its Chairman, make an annual report to the House of Delegates at such time as may be provided, which report shall include an audit of the accounts of the Treasurer and other agents of this Association and which shall also specify the character and cost of all the publications of the Association during the year, and the amounts of all other property belonging to the Association, or under its control, with such suggestions as it may deem necessary. By accepting or rejecting this report, the House may approve or disapprove the action of the Board of Trustees in whole or in part, with respect to any matter reported upon therein. In the event of a vacancy in any office other than that of President, the Board may fill the same until the annual election.

Section 3. Each Trustee shall be organizer, peacemaker and censor for his district. He shall visit each county in his district at least once a year for the purpose of organizing component societies where none exist, for inquiring into the condition of the profession and for improving and increasing the zeal of the existing component societies and their members. He shall likewise hold at least one district meeting each year in order to afford a forum for the exchange of views on problems relating to organized medicine and for postgraduate scientific study. The necessary traveling expenses incurred by a Trustee in the line of his duties herein imposed may be paid by the Treasurer upon a proper itemized statement, but this shall not be construed to include his expenses in attending the Annual Meeting of the Association.

Section 4. The Board shall have the right to communicate the views of the profession and of the Association in regard to health, sanitation, and other important matters, to the public and press. Such communications shall be signed by the President of the Association and the Chairman of the Board.

Section 5. The Journal of the Kentucky Medical Association shall be the official organ of the Association and shall be published under the supervision of the Board. The Editor of the Journal shall be elected by the Board. All money received by the Journal or by any member of its staff on its behalf, shall be paid to the Treasurer on the first of each month. The Board shall provide for and superintend the publication and distribution of all proceedings, transactions, and memoirs of the Association, and shall have authority to appoint such assistants to the Editor as it deems necessary.

Section 6. All commercial exhibits during the Annual Meeting shall be within the control and direction of the Board.

Section 7. In the event of the death, resignation, removal or disability of a Trustee, between sessions of the House of Delegates, the Alternate Trustee shall succeed to the office of Trustee. In case of disability, the Alternate shall serve until the disability is removed or the Trustee's term expires, and in the absence of the Trustee, the Alternate Trustee shall vote in his place and stead.

Section 8. The Association, upon the request of any member in good standing who is a defendant in a professional liability suit, will provide such member with the consultative service of competent legal counsel selected by the Secretary acting under the general direction of the Executive Committee. In addition, the Association may, upon application to the Board outlining unusual circumstances justifying such action, provide such member with the services of an attorney selected by the Board to defend such suit through one court.

Section 9. The Board shall employ an Executive Secretary whose principal duty shall be to carry out and execute the policies established by the House of Delegates and the Board. His compensation shall be fixed by the Board. The Executive Secretary shall act as general administrative officer and business manager of the Association and shall perform all administrative duties necessary and proper to the general management of the Headquarters Office, except those duties which are specifically imposed by the Constitution and Bylaws upon the officers, committees, councils and other representatives of the Association. He shall refer to the various elected officials all administrative questions which are properly within their jurisdiction.

He shall attend the Annual Meeting, the meetings of the House of Delegates, the meetings of the Board, as many of the committee and council meetings as possible, and shall keep separately the records of their respective proceedings. He shall, at all times, hold himself in readiness to advise and aid, so far as is possible and practicable, all officers, committees, and councils of the Association in the performance of their duties and in the furtherance of the purposes of the Association. He shall be allowed traveling expenses to the extent approved by the Board.

He shall be the custodian of the general papers and records of the Association (including those of the Treasurer) and shall conduct the official correspondence of the Association. He shall notify all members of meetings, officers of their election, and committees and councils of their appointment and duties.

He shall account for and promptly turn over to the Treasurer all funds of the Association which come into his hands. It shall be his duty to receive all bills against the Association, to investigate their fairness and correctness, to prepare vouchers covering the same, and to forward them to the Treasurer for appropriate action. He shall keep an account with the component societies of the amounts of their assessments, collect the same, and promptly turn over the

proceeds to the Treasurer. He shall within thirty days preceding each Annual Meeting, submit his financial books and records to a certified public accountant, approved by the Board, whose report shall be submitted to the House of Delegates.

He shall keep a card index register of all practitioners in the State by counties, noting on each his status in relation to his county society and upon request shall transmit a copy of this list to the American Medical Association.

He shall act as Managing Editor of the Journal of the Kentucky Medical Association under supervision of the Board and in a similar capacity to the extent that other publications are authorized by the House of Delegates.

He shall perform such additional duties as may be required by the House of Delegates, the Board, or the President, and shall employ such assistants as the Board may direct. He shall serve at the pleasure of the Board, and in the event of his death, resignation, or removal, the Board shall have the power to fill the vacancy. From time to time, or as directed by the Board, he shall make written reports to the Board and House of Delegates concerning his activities and those of the Headquarters Office.

CHAPTER VII. DISCIPLINE — THE JUDICIAL COUNCIL

Section 1. There is hereby created a Judicial Council composed of the Secretary of the Association and four members to be elected by the House of Delegates for terms of four years each. One member shall be elected from each of the traditional eastern, western, and central districts, and one member from the state at large. Members of the first Judicial Council shall be elected for terms of one, two, three, and four years, respectively so that thereafter, one member will be elected each year. The Council shall annually elect a chairman.

To be eligible for membership on the Judicial Council, a nominee shall possess at least one of the following qualifications: (1) Have served one term as an officer, trustee, or as Delegate to the AMA or (2) Have served five years as a member of the House of Delegates.

It shall be the duty of the Board of Trustees to nominate at least one candidate for each vacancy on the Judicial Council, but additional nominations may be made from the floor. Vacancies which occur between Regular Sessions of the House of Delegates, shall be filled by the Board of Trustees. No member, other than the Secretary, shall serve more than two consecutive terms.

Section 2. The Judicial Council shall be the Board of Censors of the Association. It shall be the final arbiter of all questions involving the right and standing of members, whether in relation to other members, to the component societies, or to this Association. All questions of an ethical nature brought before the House of Delegates shall be referred to the Judicial Council without discussion. A member who has been convicted of a felony or of any violation of the Medical Practice Act, or who violates any of the provisions of the constitution, bylaws, or any rule or regulation of this Association, or the Principles of Ethics of the American Medical Association shall be liable to censure, fine, suspension, or expulsion upon order of the Judicial Council. Provided, however, that if in addition to discipline by the Association, the Judicial Council shall be of the opinion that the offending member's license to practice medicine should be revoked, it shall report this to the Board of Trustees as a recommendation that the Board refer the matter to the State Board of Health for this purpose.

Upon the complaint of any member or aggrieved individual involved, the Judicial Council may initiate disciplinary proceedings against any member, and may intervene in or supersede county, individual trustee, or district disciplinary proceedings, whenever in its sole judgment and opinion, a disciplinary matter is not being handled in an expeditious manner, and may render a decision therein. In all cases in which the Association, rather than a member or aggrieved individual, appears to be the real party in interest, the Judicial Council may refer the complaint to the Board of Trustees for a determination as to whether probable cases for disciplinary action exist. If the Board of Trustees resolves this question in the affirmative, it shall so charge the respondent and a representative of the Board shall thereupon be responsible for presenting the evidence in support of such charge at any hearing held thereon.

In all proceedings of the Judicial Council, the due process requirements of reasonable notice and a full and fair hearing shall be observed. No recommended disciplinary decision of an individual trustee or any district grievance committee shall become effective unless and until approved by the Judicial Council.

Section 3. It shall consider all appeals from the recommended decisions of individual trustees and District Grievance Committees. In the case of appeals from the decisions of individual trustees, the Judicial Council may admit such oral or written evidence as in its judgment will best and most fairly present the facts, but all appeals from the recommended decisions of District Grievance Committees shall be considered on the record made before such committee. It shall be the duty of the Secretary to notify the parties with respect to its disposition of each case.

Section 4. The Judicial Council may hear appeals from the disciplinary orders of component societies. Provided, however, that such appeals shall be considered on the record made before the component societies.

Section 5. Efforts toward conciliation and compromise shall precede the hearing of all disciplinary cases, but the decision of the Judicial Council shall be final.

Section 6. Component societies are encouraged to create suitable disciplinary procedures which guarantee due process, and to dispose of all disciplinary problems which come to their attention. It is recognized, however, that it may not be feasible for some societies to do so, and the District Grievance Committees hereinafter created, are designed to meet the needs of county societies which are without a functioning grievance committee.

Section 7. The trustee of each district is hereby designated the chairman of his District Grievance Committee. The Judicial Council shall designate two additional trustees from districts adjoining that of the chairman, and the three trustees thus selected shall constitute the District Grievance Committee. All grievances which cannot be resolved by individual trustees, shall be referred to the local grievance committee or the district grievance committee for the district in which the respondent physician or county society resides.

Section 8. District Grievance Committees shall investigate every grievance coming to their attention, taking care that the physician complained of shall have ample opportunity to respond to the complaint. If, after careful investigation, the complaint appears to be without merit, the committee shall so report to the Judicial Council, including sufficient facts in its report to enable the Judicial Council to form its own conclusions.

If the District Grievance Committee's investigation indicates that the member may be a proper subject of disciplinary action, the committee shall,

upon reasonable notice, hold a hearing at which the complainant and the respondent shall be entitled to be represented by counsel, to present the testimony of witnesses in his behalf, and to cross-examine witnesses against him. All testimony shall be under oath and shall be recorded by a competent reporter at the expense of the Association, but shall not be transcribed unless and until an appeal is taken as hereinafter provided.

When all of the testimony has been heard and all evidence received, the committee shall make written findings and recomendations which it shall transmit to the Judicial Council, furnishing copies thereof to the parties.

Section 9. Any party aggrieved by the findings or recommendations of the committee, may, within 30 days, appeal to the Judicial Council. Appeals shall be taken by filing with the Secretary a copy of the entire record made before the District Grievance Committee (including a transcript of the testimony, procured at the appellant's expense) together with a written statement of appeal pointing out in detail wherein the committee has erred, and directing the attention of the Judicial Council to those portions of the transcript upon which he relies, provided, however, that the Judicial Council may extend the time in which the transcript must be filed, upon request made within the initial thirty-day period.

CHAPTER VIII. COMMITTEES AND COMMISSIONS

Section 1. The Board of Trustees shall have authority from time to time to appoint, fix the duties of, and abolish such standing committees and commissions as it deems necessary or desirable to assist it in carrying on the Association's activities in the fields of business and scientific meetings, medical education and hospitals, legislation, medical services, communications and public service, and governmental medical services.

Section 2. The Executive Committee shall serve as the nominating committee for all standing committee and commission appointments, but the trustees may make additional nominations. When the Executive Committee sits as such nominating committee, the President-Elect shall serve as Chairman.

Section 3. The President, with the advice and consent of the Chairman of the Board of Trustees, may appoint temporary, ad hoc, committees to perform specified functions. All such committees shall expire at the end of the term of the President by whom appointed.

Section 4. No committee or commission shall have power or authority to fix or determine Associational policy or to commit the Association to any course of action, such powers being expressly reserved to the House of Delegates and the Board of Trustees.

CHAPTER IX. ASSESSMENTS AND EXPENDITURES

Section 1. The annual dues for membership in this Association shall be as follows: (1) Active Members, $80, except Active Members who devote all of their time to teaching or research and have no private practice, $55; (2) Emeritus Members, no dues; (3) Associate Members, $10; (4) Inactive Members, $10; (5) Student Members, $1; (6) Service Members, no dues; (7) Special members, no dues. Dues fixed by these Bylaws shall constitute assessments against the component societies. The Secretary of each component society shall forward its assessment together with its roster of all officers and members, list of delegates, and list of non-affiliated physicians of the county to the Secretary of this Association as of the first day of January in each year.

Section 2. Any component society which fails to pay its assessments, or make the report as required, on or before the first day of April in each year, shall be held as suspended and none of its members or delegates shall be permitted to participate in any of the business or proceedings of the Association or of the House of Delegates until such requirements have been met.

Section 3. All motions and resolutions appropriating money shall specify a definite amount or so much thereof as may be necessary for the purpose, and must have prior approval of the Board of Trustees before they can become effective. No motion or resolution, the adoption of which would require a substantial expenditure of funds, shall be considered by the House of Delegates unless the funds have been budgeted or are provided by the motion or resolution.

CHAPTER X. RULES OF CONDUCT

The principles set forth in the Principles of Ethics of the American Medical Association, together with the Constitution and Bylaws of the Association and all duly adopted resolutions of the House of Delegates, shall govern the conduct of members in their relation to each other and to the public.

CHAPTER XI. RULES OF ORDER

The deliberations of this Association shall be governed by parliamentary usage as contained in Robert's Rules of Order, unless otherwise determined by a vote of its respective bodies.

CHAPTER XII. COUNTY SOCIETIES

Section 1. Except as provided in Section 4 of this Chapter, all county medical societies in this state which have adopted principles of organization not in conflict with this Constitution and Bylaws shall, upon application to the House of Delegates, receive a charter from and become a component part of this Association.

Section 2. As rapidly as can be done after the adoption of this Constitution and Bylaws, a medical society shall be organized in every county in the state in which no component society exists, and charters shall be issued thereto.

Section 3. Charters shall be issued only upon approval of the House of Delegates and shall be signed by the President and Secretary. The House of Delegates shall have authority to revoke the charter of any component society whose actions are in conflict with the letter or spirit of this Constitution and Bylaws.

Section 4. Only one component society shall be chartered in any county. Membership in the component society thus created shall entitle the members thereof to all the rights and benefits of membership in the Kentucky Medical Association.

Section 5. In sparsely settled sections two or more component societies may join for scientific programs, the election of officers, and such other matters as they may deem advisable. The component societies thus combined shall not lose any of their privileges or representation. The active members of each component society shall annually elect at least a Secretary and a Delegate for the transaction of its business with the Association.

Two or more adjacent component societies may also combine into one multi-county component society by adopting resolutions to that effect at special meetings called for that purpose on at least ten days' notice. Copies of the resolutions, certified as to their adoption by the Secretary of each society, shall be forwarded to the Headquarters Office. If

approved by the Board of Trustees, the multi-county society shall thereupon be issued a charter, the consolidating county societies shall cease to exist and the multi-county society shall become a component society of this Association; provided, however, that the active members residing in each county comprising the multi-county society shall be entitled to elect a delegate or delegates to the House of Delegates, as if each such county constituted a component society within the meaning of Section 12 of this Chapter; and provided, further, that multi-county societies may elect, at large, one alternate delegate for each delegate to which it is entitled under this section and such alternate may serve in the absence of the delegate for whom he is the designated alternate.

Section 6. Each component society shall be the sole judge of the qualifications of its own members. All members of component societies shall be members of the Kentucky Medical Association, and shall be classified in accordance with Chapter I, Section 2 of these Bylaws. Provided, however, that no physician who is under suspension or who has been expelled shall thereafter, without reinstatement by the Board of Trustees be eligible for membership in any component society. Any physician who desires to become a member of the Kentucky Medical Association shall first apply to the component society in the county in which he resides, for membership therein. Except as hereinafter provided in Sections 7 and/or 9 of this chapter, no physician shall be an active member of a component society in any county other than the county in which he resides.

Section 7. Any physician who may feel aggrieved by the action of the component society of the county in which he resides, in refusing him membership, shall have the right to appeal to the Board of Trustees, which, upon a majority vote, may permit him to apply for membership in a component society in a county which is adjacent to the county in which he resides.

Section 8. When a member in good standing in a component society moves to another county in the State, his name, upon request, shall be transferred without cost to the roster of the component society into whose jurisdiction he moves, if he is admitted to membership therein.

Section 9. A physician whose residence is closer to the headquarters of an adjacent component society than it is to the headquarters of the component society of the county in which he resides, may, with the consent of the component society within whose jurisdiction he resides, hold membership in said adjacent component society.

Section 10. Each component society shall have general direction of the affairs of the profession in the county, and its influence shall be constantly exerted for bettering the scientific, moral and material conditions of every physician in the county. Systematic efforts shall be made by each member, and by the society as a whole, to increase the membership until it embraces every qualified physician in the county.

Upon reasonable notice and after a hearing, component societies may discipline their members by censure, fine, suspension or expulsion, for any breach of the Principles of Medical Ethics or any bylaw, rule or regulation lawfully adopted by such societies or this Association. At every hearing, the accused shall be entitled to be represented by counsel and to cross-examine witnesses, and the society shall cause a stenographic record to be made of the entire proceedings. The stenographer's notes need not be transcribed unless and until requested by the respondent member.

Any physician aggrieved by the disciplinary action of a component society may, within ninety (90) days appeal to the Judicial Council, whose decision shall be final. This appeal shall be in writing and shall point out in detail the errors committed by the county society. It shall be accompanied by a transcript of the proceedings before the county society, procured at appellant's expense, and the statement of appeal shall direct the attention of the Judicial Council to those portions of the transcript upon which he relies.

Any member who fails or refuses to comply with the lawful disciplinary orders of his component society shall, if such failure or refusal continues for more than thirty (30) days, be automatically suspended from membership. Provided, however, that an appeal shall stay the suspension until a final decision is made by the Judicial Council.

The resignation of a member against whom disciplinary charges are pending or who is in default of the disciplinary judgment of his county society, a district grievance committee or the Board of Trustees shall not be accepted and no member who is suspended or expelled may be reinstated or readmitted unless and until he complies with all lawful orders of his component society and the Board of Trustees.

Section 11. Frequent meetings shall be encouraged, and the most attractive programs arranged that are possible. The younger members shall be especially encouraged to do postgraduate and original research work, and to give the society the first benefit of such labors. Official positions and other references shall be unstintingly given to such members.

Section 12. At the time of the annual election of officers, each component society shall elect a delegate or delegates to represent it in the House of Delegates. The term of a delegate shall commence on the first day of the regular session of the House following his election, and shall end on the day before the first day of the next regular session. Provided, however, that component societies may elect delegates for more than one term at any election. Each component society may elect one delegate for each 25 members in good standing, plus one delegate for one or more members in excess of multiples of 25. Provided, however that each component society shall be entitled to at least one delegate regardless of the number of members it may have and the secretary of the society shall send a list of such delegates to the Secretary of this Association not later than 45 days before the next Annual Meeting. It shall be the obligation of a component society which elects delegates to serve more than one year, to provide the KMA Headquarters Office with a certified list of its delegates each year.

Section 13. The secretary of each component society shall keep a roster of its members and a list of non-affiliated licensed physicians of the county, in which shall be shown the full name, address, college and date of graduation, date of license to practice in this State, and such other information as may be deemed necessary. He shall furnish an official report containing such information upon blanks supplied him for the purpose, to the Secretary of the Association, on the first day of January of each year, or as soon thereafter as possible, and at the same time the dues accruing from the annual assessment are sent in. In keeping such roster the secretary shall note any change in the personnel of the profession by death or by removal to or from the county, and in making his annual report he shall be certain to account for every physician who has lived in the county during the year.

Section 14. The secretary of each component society shall report to the Journal of the Kentucky Medical Association full minutes of each meeting and forward to it all scientific papers and discussions which the society shall consider worthy of publication.

CHAPTER XIII. AMENDMENTS

These Bylaws may be amended at any session of the House of Delegates by a two-thirds vote of all the delegates present at that session, after the amendment has laid on the table for one day, provided, however, that an amendment may be proposed in the report of a reference committee and considered by the House without having laid on the table for one day.

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Under the Supervision of the Board of Trustees

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